2015 Cancer Incidence and Mortality in North Carolina

State Center for Health Statistics

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Introduction

Cancer is a group of diseases in which there is an uncontrolled growth of abnormal cells in a part of the body. One out of every two men and one out of every three women in the United States will develop cancer during their lifetimes.[1] In 2015, cancer was the leading cause of death in North Carolina.[2] In order to determine the effect cancer has on the state's population, the North Carolina Central Cancer Registry (CCR) collects, compiles and tabulates data regarding the occurrence of cancer and reports the deaths due to cancer within the state. This report is a summary of the incidence and mortality due to cancer with the most complete and recent data the CCR has available.

Background

The CCR, located in the State Center for Health Statistics (SCHS), was established in 1986. The CCR operates under the authority granted in North Carolina General Statute 130A-208.[3] Legislation declaring cancer reporting to be mandatory in North Carolina became effective in 1947. Authorized funding for establishing a registry, however, was not appropriated until 1986. Between 1986 and 1989, only 50-60 percent of the cases were reported each year. The first year for which relatively complete statewide reporting was achieved was 1990. In 1999, new legislation was passed that requires every healthcare provider that detects, diagnoses or treats cancer cases to report all cases to the CCR.[3]

On a national level, the CCR reports data to the North American Association of Central Cancer Registries (NAACCR)[4] and the Centers for Disease Control and Prevention National Program of Cancer Registries (NPCR)[5]. Both organizations annually review the data the CCR submits, for completeness, quality and timeliness. Completeness is the percentage of cases reported. Having high quality data ensures that there are not duplicate records per case and that certain data variables are accurate and complete. In order to meet the timeliness requirement, the data must be submitted within 23 months of the completion of the diagnosis year under review. For the last nine years, the CCR has achieved the NAACCR Gold Standard for Registry Certification. This certification is the highest NAACCR standard awarded for completeness, quality and timeliness of data. The CCR continues to meet the requirements for NPCR in order to receive funding and to have data publicized nationally.

Purpose

As a population-based registry, the CCR collects, analyzes and disseminates information on the occurrence of cancer in North Carolina. The data collected include patient demographics (e.g., race, gender and age) and medical information on each cancer diagnosis (e.g., primary site, morphology, stage and first course of treatment). This information is used to improve cancer treatment and identify groups that have higher incidence and mortality from cancer.[6] The CCR preserves the confidentiality of information obtained for medical, educational, research and statistical purposes. No identifying information regarding patients, hospitals or physicians is released except under the conditions specified in General Statute and North Carolina Administrative Code.[3]

2015 Cancer Incidence and Mortality in North Carolina is the 22nd annual report of the CCR. The contents of this report represent a summary of the information collected on cancer diagnoses and deaths in 2015. The information includes incidence and mortality counts and rates for all cancers

by county, race, gender and age. The primary goal of this report is to provide cancer data to healthcare planners, researchers and the general public.

Data Sources and Collection

Healthcare providers who detect, diagnose and treat cancer report cases to the CCR. The CCR receives data on death due to cancer from the Vital Records (VR) Branch, also located in the SCHS. The data are coded according to standard procedures and guidelines.

Cancer Incidence

Cancer incidence is the number of newly diagnosed cancer cases, not including recurrences, during a particular time period within a certain population. With each cancer diagnosis or treatment, the healthcare providers report the case to the CCR within six months. The CCR releases data approximately two years after the end of the diagnosis year, due to reporting delay, consolidation of records and cleaning of files.

From each case, the CCR collects patient demographics and medical information on the cancer diagnosis. Some demographics the CCR receives regarding an individual diagnosed with cancer include race, ethnicity, gender, age and residence. In addition, the CCR gathers data such as the first location of the cancer (primary site), the form of cancer (morphology), tumor size and the spread of the cancer (stage). Data regarding first course of treatment and vital status are also collected.

The CCR receives the majority of the cancer incidence data from healthcare facilities (hospitals, cancer centers, dermatology centers, urology centers and surgical oncology centers). Incidence data also come from physician offices, pathology reports, interstate data exchange, nursing facilities and death clearance cases. At present, there are 113 hospitals which routinely diagnose and treat cancer patients. Of these, 85 have tumor registries where the data are abstracted and submitted to the CCR.,1 men's federal prison, 1 men's state prison, 1 women's state prison, 4 Veterans Affairs (VA) hospitals and 4 Department of Defense (DoD) facilities. Also, there are 165 physician offices and clinics, as well as 53 pathology laboratories in North Carolina reporting to the CCR. Death Clearance is a process of linking the death certificates with the cancer incidence data to identify cancer cases that may have been missed through regular reporting. For 2015 diagnosis year, the CCR received 86,735 reports from over 230 facilities.

Cancer Mortality

Cancer mortality is the number of deaths due to cancer during a specified time period within a certain population. Death certificates are filed to a county health director within five days. The death certificate is then passed on to VR on the fifth day of the following month.[3]

Once a year, VR provides the CCR with data on the deceased whose primary cause of death is cancer. This information includes demographics on the deceased including race, ethnicity, gender, age and residence. In addition to demographics, a primary cause of death and date of death are also collected.

Differences in Collecting Incidence and Mortality

For many studies, the CCR examines both incidence and mortality. Therefore, it is important to note differences in obtaining incidence data and mortality data. These differences include, but are not limited to, timeliness in reporting (both in state and out-of-state cases) and case finding.
There is a difference in the timeliness of reporting incidence and mortality data of cases reported in the state for North Carolina residents. For incidence data, the healthcare facility is supposed to report the case to the CCR within six months. However, with mortality data, a report of each death is submitted to the VR within two months.

Some people living near neighboring states go outside North Carolina for health care. Also, people may get diagnosed with or die of cancer outside of the state. North Carolina has an exchange agreement for cancer incidence data with 37 states and Washington, D.C., including its border states of Virginia, Tennessee and South Carolina. In addition, North Carolina has an exchange agreement with the other 49 states, as well as with Washington, D.C., and United States territories, for exchanging death certificates. Typically, incidence data are exchanged twice a year while mortality data, monitored by the National Center for Health Statistics (NCHS), are exchanged between states within two months of a death. However, even with these exchange agreements in place, delays or omissions can occur in the interchange of incidence and mortality records.

Although new cancer cases are required by law to be reported to the CCR, there are many that are not. Cases diagnosed in small hospitals that do not have a cancer registry may be under reported. Physicians associated with a large hospital will often report cases via a hospital registrar, but those not affiliated with a hospital may not have ample staff to report cases to the CCR. In the last few years, more cases are being diagnosed and treated in physician offices or surgical oncology centers and may never be referred to an oncologist nor be reported. The CCR has improved the completeness of reporting by recruiting physician offices and pathology laboratories as well as sending staff to smaller facilities to collect the required data. Despite the efforts of the CCR, incidence data are considered to be incomplete. On the other hand, death data are regarded as complete. Therefore, there may appear to be an excess of deaths compared to the number of cases for some cancers in rural counties.

Cancer Classification

The CCR receives an abstract of each medical record from a reporting facility. Each abstract contains specific medical information about the cancer. The cancers are categorized using codes according to the *International Classification of Diseases for Oncology, Third Edition.*[7] Each code is comprised of two pieces: topography and morphology. The topography code tells where the tumor began (primary site). The morphology code tells the type of cell (histology), the way it behaves within the body (behavior) and supplementary information about the tumor (grade). Care must be taken when coding lymphomas and leukemia.

The medical record also contains data regarding the cancer stage. The stage at diagnosis indicates how far the cancer has spread when it is first diagnosed. Knowing the extent of the cancer is important in treatment and prognosis. The CCR commonly uses National Cancer Institute's Surveillance, Epidemiology, and End Results Program[8] definitions for staging and groups cancers as in situ, local, regional, distant and unknown.

In the data collected by the CCR, only malignant tumors are included with one exception. Data on benign brain and central nervous system tumors are also reported to the CCR. Only malignant

tumors are included in this report. In situ cases are generally reportable to the CCR. However, these tumors, with the exception of in situ breast and bladder cases, are not used in cancer surveillance or in cancer incidence statistics. Data on basal and squamous cell skin cancers are not collected by the CCR unless they have spread to tissue beyond the original site. Malignant melanoma may occur at many different body sites; however, this report focuses on melanoma of the skin.

Statistical Methods

Populations not only vary in size, but also in their racial, gender and age breakups. Thus, the counts of cancer incidence and mortality have limitations when comparisons are needed.

Rates are used to show the risk of an event occurring in a population and the CCR presents rates per 100,000 persons. The CCR calculates rates for both incidence and mortality data. A crude rate is found by dividing the number of events (e.g., cancer cases or deaths) for a population of interest in a specified time period by the population of interest at risk during the same time period. This ratio is then multiplied by 100,000 to express it as a rate per 100,000 persons. A crude rate can be expressed as

$$crude\,rate = \frac{count\ of\ events\ for\ a\ population\ of\ interest}{population\ of\ interest\ at\ risk} \times 100{,}000.$$

Crude incidence and mortality rates for 2015 used the population estimates obtained from the NCHS. Incidence reports published by the CCR prior to 2006 were calculated using the State Demographer's population estimates. Hence, rates from reports prior to 2006 are not comparable to rates in this report.

Age-Specific Rates

An age-specific rate is an example of a crude rate where the population of interest is a specific age group. For age group *i*, an age-specific rate can be calculated as

$$age\text{-}specific\ rate_i = \frac{count\ of\ events\ for\ age\ group_i}{population\ of\ age\ group_i\ at\ risk} \times 100{,}000.$$

A typical way to divide age groups is in five-year increments (0-4, 5-9, …, 80-84, 85+). In this report, the ages are grouped as 0 to 19 (pediatrics), 20 to 44 (young adults), 45 to 64 (middle-aged adults) and 65 and older (senior adults).

Age-specific rates are used to examine the burden cancer has on a particular age group and to determine the need for services for a given population. In addition, they can be used to compare different population groups of the same age and notice the effect that cancer has on the various populations. Within a population, age-specific rates can be used to examine how cancer burden differs among age groups.

Age-Adjusted Rates

The occurrence of an event may vary with age, and the age structure of a population can vary as well. Therefore, age-specific rates are not always useful for comparisons and as a result must be adjusted to account for these differences. An age-adjusted rate is a weighted average of the age-specific rates expressed as a rate per 100,000 persons. Age-adjusted rates should be used only if the same standard population is used for computing weights. The standard population provides the

proportion of the population in specific age groups and includes information regarding age, but not race, sex or geographic location. The standard population the CCR uses is the 2000 United States Census population.

To calculate age-adjusted rates, multiply each age-specific rate by the proportion of individuals in that age group in the standard population. For example, for age group i,

$$weighted\,rate_i = age\text{-}specific\,rate_i \times \frac{standard\,population\,in\,age\,group_i}{total\,standard\,population}.$$

The age-adjusted rate is the sum of all the weighted age-specific rates. For n age groups the age adjusted rate is

$$age\text{-}adjusted\,rate = weighted\,rate_1 + weighted\,rate_2 + \cdots + weighted\,rate_n.$$

An age-adjusted rate allows comparison between populations of different age groups, time periods and/or geographic areas. Age-adjusting ensures that discrepancies in rates of various populations are not a result of differences in age distributions.

Gender-Specific Rates

In addition to computing rates by age, rates can be computed by gender. For both incidence and mortality, gender data are collected by the CCR and VR, respectively. Gender-specific rates are used for comparison between different population groups of the same gender and to examine how cancer tendencies differ between males and females. Gender-specific rates are also used when calculating rates that only affect males (e.g., prostate and testes) or females (e.g., ovary and cervix).

Race-Specific Rates

Rates can also be calculated by race. Race-specific rates are used for comparison between different population groups of the race and to examine how the cancer burden varies between racial groups.

Both race and Hispanic ethnicity are collected by the CCR. Race information can be classified as one of the following: white, black, Asian/Pacific Islander, American Indian and other. Although the CCR has five race fields to account for people who are multi-racial, only the primary race is used. Often the CCR reports rates for whites and minorities. Minorities are defined to be blacks, Asian/Pacific Islanders, American Indians and others. To assist in identifying Hispanic ethnicity, the CCR uses the NAACCR Hispanic Identification Algorithm (NHIA). This algorithm uses name, birthplace, gender and race to determine Hispanic ethnicity.[9] Thus, the CCR can report rates on white non-Hispanics, black non-Hispanics, other races non-Hispanics and Hispanics.

Reliability of Rates

Precautions should always be taken when comparing rates. Rates are not a measure of actual risk. They are used to compare cancer burden between time periods, age groups, gender groups and racial groups. Both the size of the numbers and the characteristics of the population are important indicators of the real value of the rate. Rates based on a small number of cases or for sparsely populated geographic areas should be viewed with caution. Small fluctuations can lead to drastic changes. Therefore, sometimes it is more appropriate to look at the number of cases instead of the rates. When the number of events is small, multiple-year summary rates will provide a much better measurement of risk. Expanding the period of time studied enlarges the absolute numbers and adds more credence to a statement regarding a rate.[10]

Limitations of Data

When comparing rates between two populations, the user should note that age structure is the only difference between the populations for which rates have been adjusted. Since county demographics can vary considerably, one needs to be careful not to misinterpret rates. Racial composition, for example, can have a marked influence on the patterns of cancer incidence and mortality. Under-reporting, due to out-of-state cases or poor case-finding in some non-hospital situations, also needs to be taken into account when making comparisons of cancer data.

Summary of 2015 Cancer Data

The CCR collected approximately 56,225 cases of newly diagnosed cancers and 19,309 deaths due to cancer in 2015 (Table 1). Female breast, prostate, lung and bronchus, and colon and rectum cancers were the leading diagnosed cancers among all gender and races combined. The CCR often refers to these as the top four cancers (Table 2).

Cancer risk is strongly associated with lifestyle and behavior. Dietary patterns, alcohol use, and sexual and reproductive behaviors, which vary by demographic groups, are risk factors of cancer. Cancer is diagnosed more often among older North Carolinians than younger ones. Females have higher cancer incidence while males have higher mortality rates. Overall, non-Hispanic blacks and non-Hispanic whites had the highest incidence and mortality rates when compared with non-Hispanic other races and Hispanics. Lung and bronchus cancer was the most common cause of death due to cancer.

Age

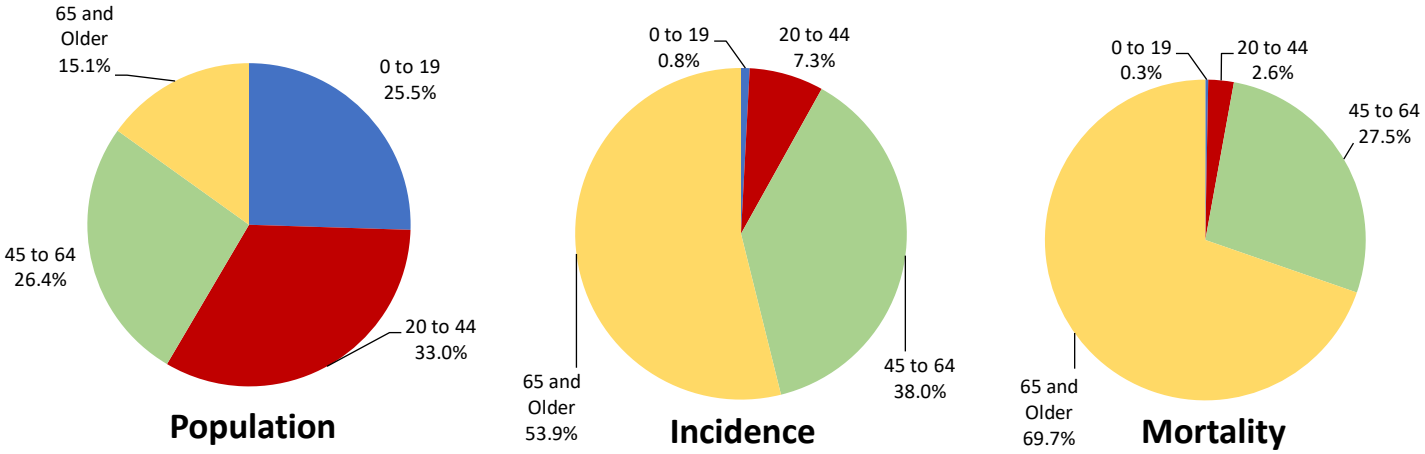
More adults are directly affected by cancer than children. Senior adults (ages 65 and older) made up about 15 percent of the population in 2015,[11] but accounted for over 50 percent of newly diagnosed cancer cases and two-thirds of deaths due to cancer. Children (ages 0 to 19) were the third largest age group but made up less than 1 percent of both newly diagnosed cancers and deaths due to cancer (Chart 1). In 2015, the median age at which cancer was diagnosed was 66, but people ranged in age from 2 to 106. People who died of cancer ranged in age from 1 to 106 with the median age being 72. The median age of incidence and mortality for each age group as well as the percentage of cases and deaths the top four cancers comprise are shown below. In both middle-aged and senior adults, the top four cancers combined accounted for more than half of the cancer cases and cancer deaths (Chart 2).

Children had a very different pattern of cancer than adults. Leukemia, Hodgkin Disease, Soft Tissue, Brain and Endocrine cancers accounted for 49 percent of cancers diagnosed in people under age 20. Leukemia, Bone, Soft Tissue, Brain and Endocrine cancers made up over 82 percent of pediatric cancer deaths (Tables 5 and 6).

Young adults (ages 20 to 44) had a different pattern of cancer than children. In this age group, there was a greater incidence of female breast, lung/bronchus, melanoma and colorectal cancers than in the pediatric age group. On the other hand, the proportion of bone cancer was lower. Female breast cancer accounted for over 17 percent of all cancer deaths and had the highest mortality rate within this age group. The mortality rate for female breast cancer was more than doubled the next highest cancer rate, colon and rectum (Tables 5 and 6).

Cancer patterns were different in middle-aged adults (ages 45 to 64) compared with young adults. In this age group, there was a higher frequency of prostate cancer. The percentage of testicular cancer and Hodgkin disease were lower. The frequency of lung and bronchus cancer deaths was higher for middle-aged adults than young adults (Tables 5 and 6).

Chart 1: 2015 Percentages of N.C. Population, Cancer Incidence and Mortality by Age



In senior adults, cancer patterns were similar to middle-aged adults. The incidence of cervical and testicular cancers were lower. Lung and bronchus cancer accounted for more deaths than colon and rectum, female breast and prostate cancers combined (Tables 5 and 6).

Chart 2: 2015 Median Age and Percentage of Top Four Sites for Cancer Incidence and Mortality by Age Group

	Incidence		Mortality	
	Median Age	Top 4 Sites	Median Age	Top 4 Sites
Children (ages 0-19)	11	3.0%	8.5	1.8%
Young Adults (ages 20 to 44)	38	35.8%	40	38.2%
Middle-Aged Adults (ages 45 to 64)	57	54.0%	58	48.5%
Senior Adults (ages 65 and older)	73	52.9%	76	49.4%

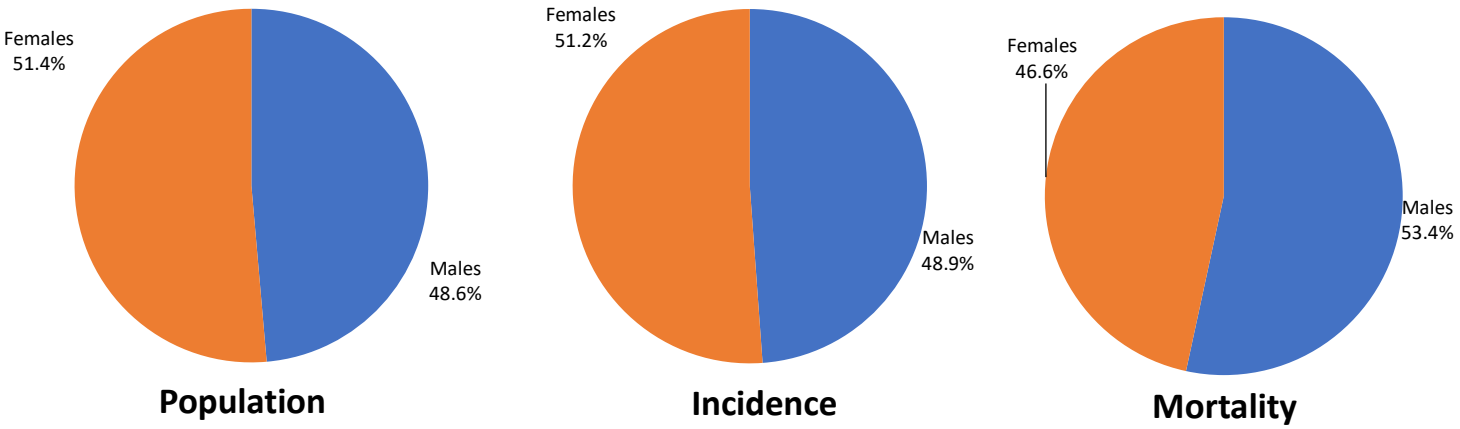
Gender

In 2015, more than 50 percent of the state population was female. While more than half of all cancer cases were diagnosed in females, more than half of deaths due to cancer were in males (Chart 3). The median age of diagnosis for females was slightly younger than males, but the median age of mortality for females was older than males. The top four sites comprised about half of both cancer incidence and mortality (Chart 4).

The most frequently occurring cancers among males were prostate, lung and bronchus, colon and rectum, bladder and melanoma. Lung and bronchus, prostate, colon and rectum, pancreatic and liver cancers were the leading causes of death due to cancer (Table 8).

Among females, the most frequently occurring cancers were breast, lung and bronchus, colon and rectum, uterine and melanoma. Lung and bronchus, breast, colon and rectum, pancreatic and ovarian were the leading causes of death due to cancer (Table 8).

Chart 3: 2015 Percentages of N.C. Population, Cancer Incidence and Mortality by Gender



Differences between genders could provide clues to factors involved in the development of cancer. Esophageal, laryngeal, urinary bladder, liver and oral cavity cancers had a higher frequency among males compared with females. However, females had a higher frequency of endocrine cancer compared with males. In males, about one third of deaths due to cancer came from lung and bronchus cancer, whereas in females, lung and bronchus cancer constituted about one quarter of cancer deaths (Table 7).

Chart 4: 2015 Median Age and Percentage of Top Four Sites for Cancer Incidence and Mortality by Gender

	Incidence		Mortality	
	Median Age	**Top 4 Sites**	**Median Age**	**Top 4 Sites**
Males	66	47.7%	71	47.3%
Females	65	55.5%	72	50.4%

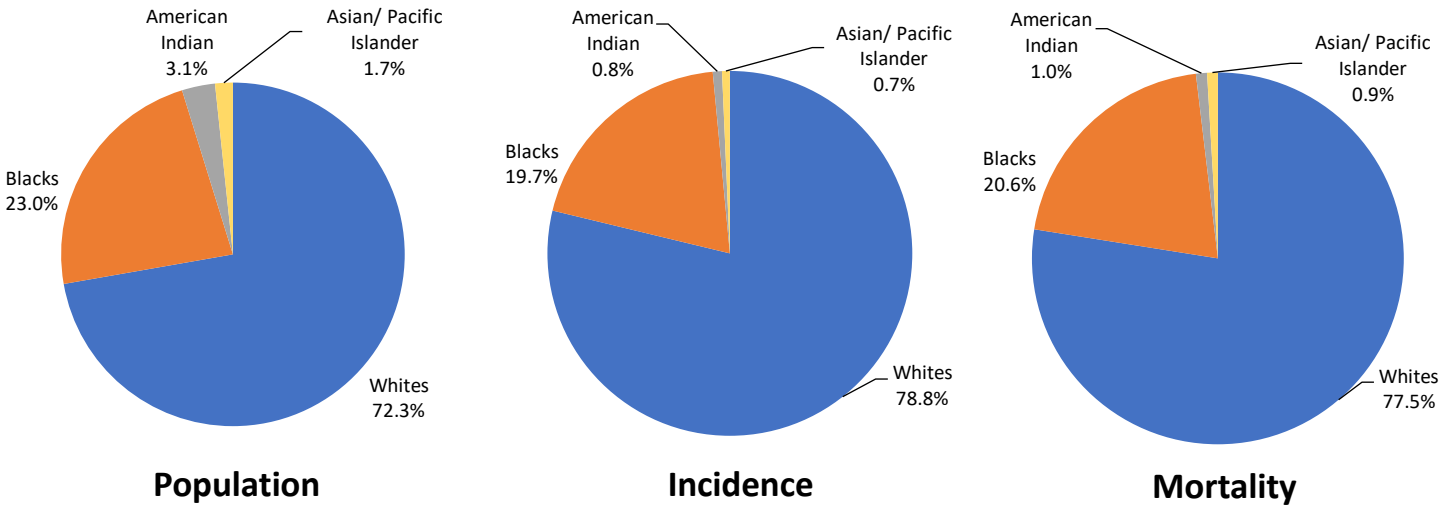
Race and Ethnicity

In 2015, about 72 percent of the North Carolina population was white. Blacks comprised more than one-fifth of the population. About 79 percent of cancer cases and 78 percent of cancer deaths occurred in whites while about 20 percent of cancer cases and deaths occurred in blacks (Chart 5). The median age and the percentage the top four cancer sites comprise among all cancers for both incidence and mortality are displayed for all racial ethnic groups (Chart 6). Hispanics had the youngest median age of incidence as well as mortality. About 58 percent of cancer diagnosed in non-Hispanic blacks were from the top four sites.

For non-Hispanic whites, besides the top four cancers, melanoma was the next most frequently diagnosed cancer. Pancreatic cancer was the third leading cause of death in this group. The number of lung and bronchus cancer deaths was about 1.4 times as large as the number of deaths due to female breast, pancreatic, and colon and rectum cancers combined (Table 14).

Among non-Hispanic blacks, prostate cancer comprised approximately 16 percent of all diagnosed cancers. Kidney cancer was also among the top five frequently diagnosed cancers for this group. Pancreatic cancer was the fourth leading cause of death among non-Hispanic blacks. The number of lung and bronchus cancer deaths was higher than the number of deaths due to female breast and colon and rectum cancer combined (Table 14).

Chart 5: 2015 Percentages of N.C. Population, Cancer Incidence and Mortality by Race



For non-Hispanic other races, besides the top four cancers, melanoma was another commonly diagnosed cancer. The combined number of cancer deaths due to pancreatic and liver cancers were higher than those due to colorectal cancer in this group (Table 14).

For Hispanics, outside of the top four cancers, endocrine cancer was the most frequently diagnosed. Lung and bronchus cancer constituted 17 percent of cancer deaths. For other racial and ethnic groups, lung and bronchus cancers made up about 23 percent of cancer deaths. In Hispanics, stomach cancer was the fifth leading cause of death due to cancer (Table 14).

Chart 6: 2015 Median Age and Percentage of Top Four Sites for Cancer Incidence and Mortality by Race and Ethnicity

	Incidence		Mortality	
	Median Age	**Top 4 Sites**	**Median Age**	**Top 4 Sites**
Non-Hispanic Whites	67	50.6%	72	48.9%
Non-Hispanic Blacks	63	57.6%	68	49.9%
Non-Hispanic Other Races	64	49.2%	69	43.4%
Hispanics	56	43.2%	65	35.2%

Conclusion

This descriptive report is intended to serve as a reference on cancer incidence and mortality for healthcare planners, researchers and the general public. This publication should not be regarded as a definitive description of the cancer incidence in North Carolina. Although there are important

limitations in the use of these data, the observed number of cases and the calculated rates within a county, a gender group, a racial and ethnic group, or an age group have many uses. These uses include planning and evaluating health services at the county and state level and identifying cancer disparities between specific groups. The data provided by the CCR can be used by the Comprehensive Cancer Program in the Division of Public Health and other research organizations for prevention, detection and treatment of cancer.

The editor would like to thank Chandrika Rao, Christian Klaus, Eleanor Howell, and the other members of the CCR staff for their contributions to this report.

Available Cancer Information

North Carolina Central Cancer Registry
www.schs.state.nc.us/units/ccr/ 919-715-4574

North Carolina State Center for Health Statistics
www.schs.state.nc.us 919-733-4728

North Carolina Breast and Cervical Cancer Control Program
http://bcccp.ncdhhs.gov 919-707-5300

North Carolina CCR Rapid Case Ascertainment
http://unclineberger.org/research/core-facilities/rapid-case-ascertainment 919-966-0032 919-715-4560

American Cancer Society
www.cancer.org 1-800-ACS-2345

National Cancer Institute
www.cancer.gov 1-800-4-CANCER

Surveillance Epidemiology, and End Results
http://seer.cancer.gov

Cancer Control P.L.A.N.E.T.
http://cancercontrolplanet.cancer.gov

NCI State Cancer Profiles
http://statecancerprofiles.cancer.gov

National Program of Cancer Registries
www.cdc.gov/cancer/NPCR

North American Association of Central Cancer Registries
www.naaccr.org

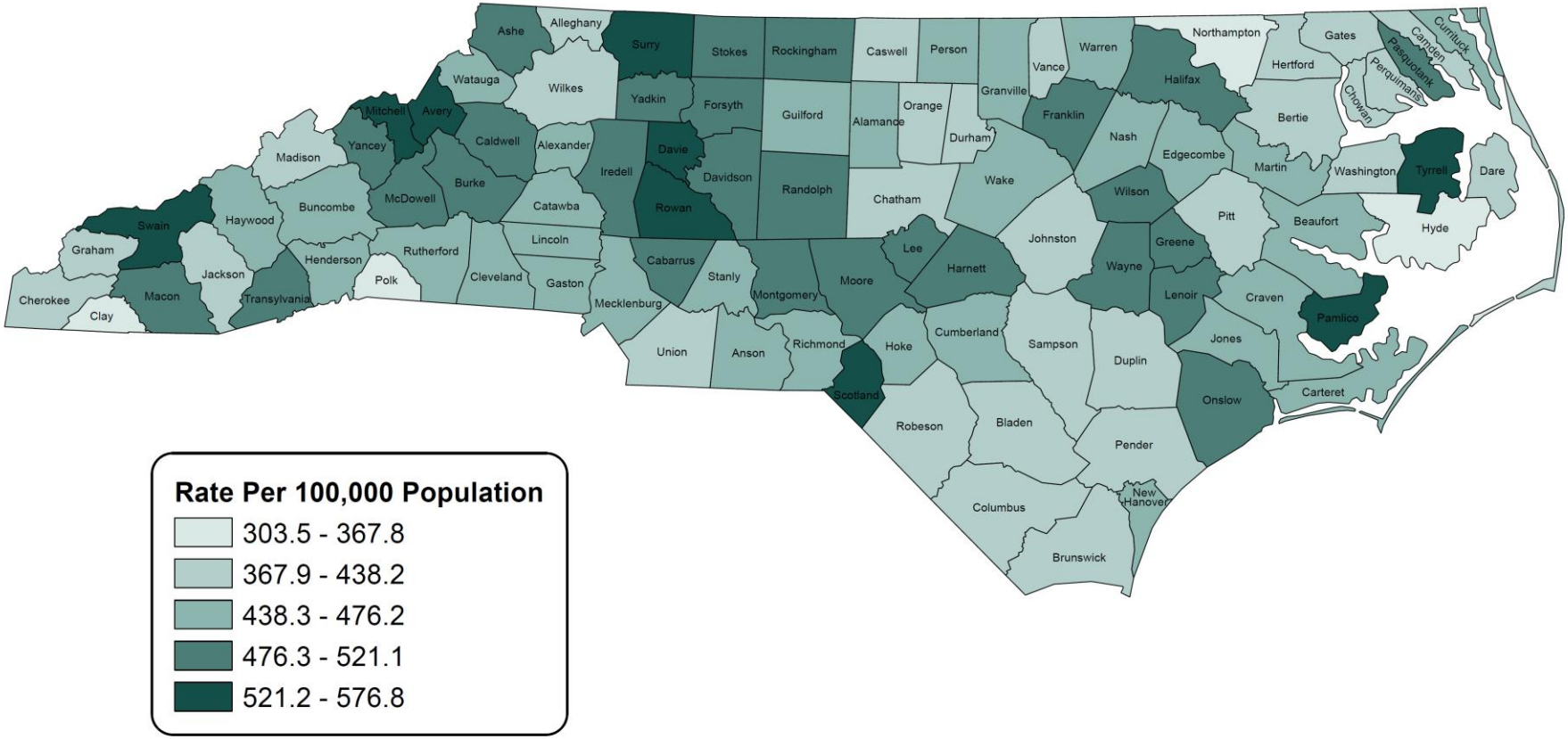
Centers for Disease Control and Prevention
www.cdc.gov

CDC Wonder United States Cancer Statistics
http://wonder.cdc.gov/cancer.html

Association of North Carolina Cancer Registrars
www.ncregistrars.com

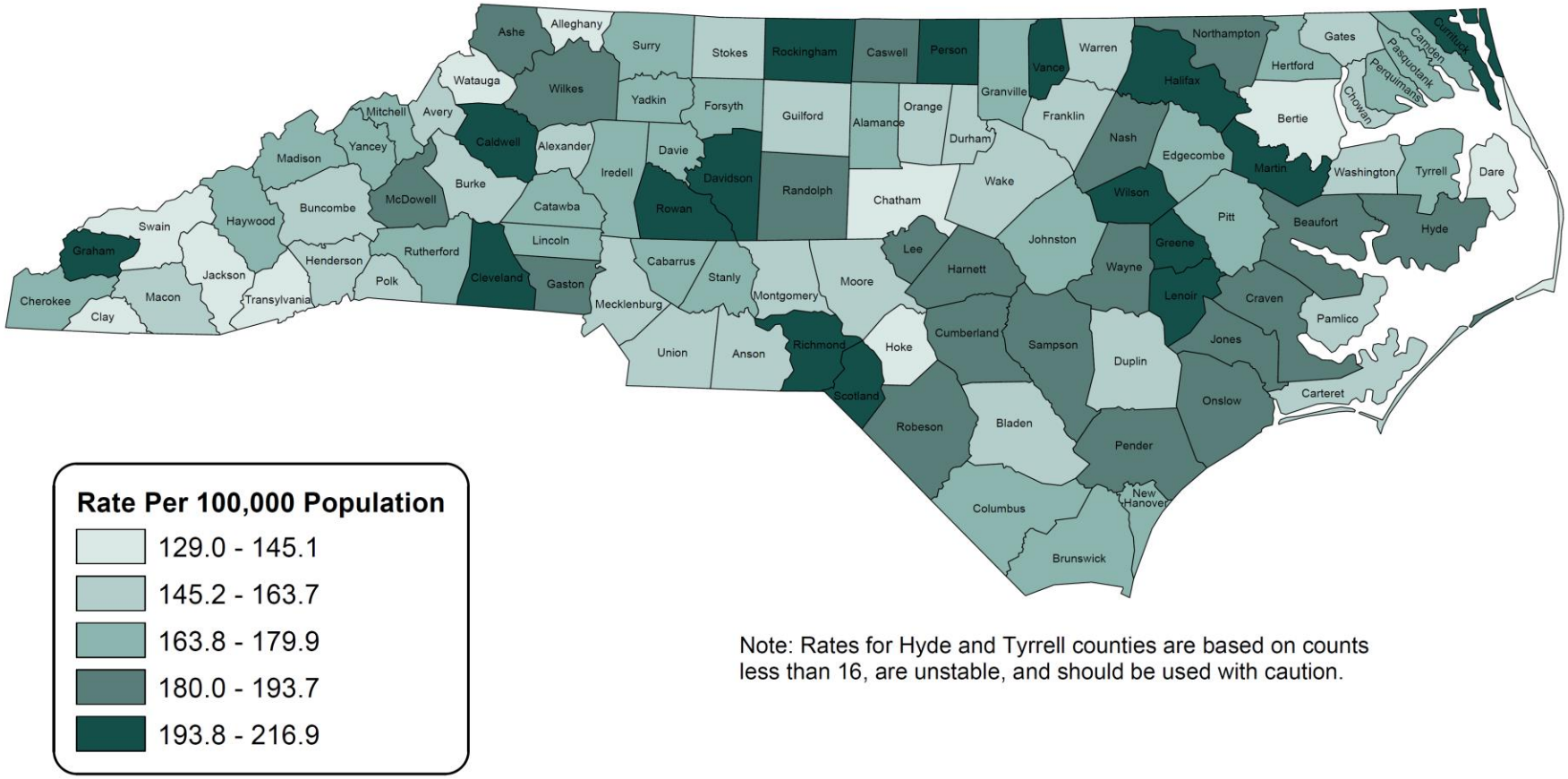
National Cancer Registrars Association
www.ncra-usa.org

Map 1: 2015 North Carolina Cancer Incidence Rates by County



Note: Rates are based on cases reported to the North Carolina Central Cancer Registry and are subject to change as files are updated.

Map 2: 2015 North Carolina Cancer Mortality Rates by County



Note: Rates are based on cases reported to the North Carolina Central Cancer Registry and are subject to change as files are updated.

Table 1: 2015 North Carolina Cancer Incidence and Mortality

	Incidence		Mortality	
	Cases	**Rate**	**Cases**	**Rate**
All Cancers	56,225	475.9	19,309	164.7
Oral Cavity and Pharynx	1,530	12.8	276	2.3
Lip	51	0.5	1	0.0
Tongue	467	3.9	74	0.6
Salivary Glands	149	1.3	25	0.2
Floor of Mouth	83	0.7	3	0.0
Nasopharynx	73	0.6	21	0.2
Oropharynx	77	0.6	32	0.2
Hypopharynx	88	0.7	10	0.1
Other Mouth and Pharynx	542	4.5	110	0.9
Digestive System	9,226	77.8	4,862	41.3
Esophagus	480	4.0	432	3.6
Stomach	720	6.0	344	3.0
Small Intestine	340	2.9	54	0.5
Colon and Rectum	4,380	37.3	1,642	14.2
Anus and Anal Canal	235	1.9	35	0.3
Liver and Intrahepatic Bile Duct	1,062	8.5	845	6.9
Gallbladder	133	1.1	74	0.6
Pancreas	1,523	12.9	1,316	11.2
Other Digestive Organs	353	3.0	120	1.1
Respiratory System	8,769	72.4	5,651	47.1
Larynx	462	3.7	149	1.2
Lung and Bronchus	8,138	67.2	5,464	45.6
Other Respiratory Organs	169	1.5	38	0.3
Bones and Joints	89	0.9	44	0.4
Soft Tissue including Heart	329	3.0	141	1.3
Malignant Melanoma of the Skin	3,076	26.8	141	1.3
Breast	10,134	87.1	1,410	12.1
Invasive Breast	8,373	72.0		
In Situ Breast	1,761	15.1		
Female Genital System	3,030	48.2	857	13.1
Cervix Uteri, Invasive	370	6.9	110	1.9
Uterus (Corpus, NOS)	1,671	25.5	278	4.1
Ovary	658	10.6	403	6.1
Other Female Genital Organs	331	5.2	66	1.0

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include in situ cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 1 (continued): 2015 North Carolina Cancer Incidence and Mortality

	Incidence		Mortality	
	Cases	**Rate**	**Cases**	**Rate**
Male Genital System	6,829	118.1	924	20.6
Prostate	6,517	111.6	904	20.1
Testis	250	5.3	5	0.1
Penis	48	1.0	11	0.2
Other Male Genital Organs	14	0.3	4	0.1
Urinary System	4,300	36.5	922	8.0
Urinary Bladder	2,234	19.0	472	4.2
Kidney and Renal Pelvis	1,949	16.5	423	3.6
Ureter	76	0.7	9	0.1
Other Urinary Organs	41	0.3	18	0.2
Eye and Orbit	72	0.6	12	0.1
Brain and Other CNS	712	6.4	487	4.3
Endocrine System	1,408	13.3	69	0.6
Thyroid Gland	1,327	12.6	43	0.4
Other Endocrine and Thymus	81	0.8	26	0.2
Lymphomas	2,246	19.6	649	5.7
Hodgkin Disease	252	2.5	29	0.3
Non-Hodgkin Lymphoma	1,994	17.1	620	5.4
Multiple Myeloma	845	7.2	450	3.9
Leukemia	1,393	12.2	721	6.4
Acute Lymphocytic Leukemia	35	0.4	50	0.5
Chronic Lymphocytic Leukemia	516	4.3	125	1.1
Acute Myeloid Leukemia	459	4.1	325	2.9
Chronic Myeloid Leukemia	220	2.0	43	0.4
Other Leukemia	163	1.5	178	1.6
Other Cancers - Uncategorized	5,731	50.4	1,546	13.3

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 2: 2015 North Carolina Top Ten Cancer Incidence and Mortality Sites

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	10,032	160.8	Lung and Bronchus	5,464	45.6
Prostate	6,518	111.6	Female Breast	1,396	21.6
Lung and Bronchus	8,138	67.2	Prostate	904	20.1
Colon and Rectum	4,380	37.3	Colon and Rectum	1,647	14.2
Melanoma (Skin)	3,076	26.8	Pancreas	1,316	11.2
Corpus Uteri	1,671	25.5	Liver	845	6.9
Urinary Bladder	2,234	19.0	Leukemia	721	6.4
Non-Hodgkin Lymphoma	2,008	17.2	Ovary	403	6.1
Kidney	1,949	16.5	Non-Hodgkin Lymphoma	620	5.4
Endocrine	1,408	13.3	Brain and Other CNS	487	4.3

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 3: 2015 Cancer Incidence and Mortality by County

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
North Carolina	56,225	475.9	19,309	164.7
Alamance	1,039	525.0	356	174.4
Alexander	230	437.2	74	143.7
Alleghany	81	437.0	21	115.4
Anson	129	400.0	67	200.2
Ashe	193	466.6	88	202.9
Avery	113	435.8	41	163.3
Beaufort	304	435.0	147	195.3
Bertie	136	456.7	50	169.0
Bladen	205	423.5	80	158.2
Brunswick	1,012	476.9	328	157.6
Buncombe	1,627	473.1	524	148.8
Burke	643	519.4	234	188.5
Cabarrus	996	483.4	330	167.2
Caldwell	533	488.1	190	171.8
Camden	73	572.7	17	139.9
Carteret	538	501.2	168	151.6
Caswell	184	519.0	72	208.5
Catawba	936	482.1	344	178.9
Chatham	562	492.8	141	111.5
Cherokee	226	478.6	58	122.5
Chowan	120	543.4	48	191.5
Clay	99	503.0	35	154.1
Cleveland	633	507.1	255	198.7
Columbus	332	431.7	101	126.1
Craven	643	502.0	243	181.0
Cumberland	1,439	468.2	518	173.8
Currituck	150	465.8	46	150.1
Dare	281	565.5	77	158.2
Davidson	1,049	488.1	410	189.6
Davie	302	510.0	109	172.3
Duplin	312	416.8	130	175.0
Durham	1,339	452.6	436	155.1
Edgecombe	338	475.5	141	197.4
Forsyth	2,131	493.4	714	165.7

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 3 (continued): 2015 Cancer Incidence and Mortality by County

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
Franklin	375	479.8	126	160.2
Gaston	1,302	506.4	471	183.9
Gates	69	455.3	28	182.4
Graham	65	518.9	19	145.6
Granville	352	471.9	123	168.9
Greene	122	455.4	37	135.3
Guilford	2,948	507.1	931	161.1
Halifax	348	474.4	142	188.3
Harnett	585	474.6	224	190.8
Haywood	531	554.7	157	155.3
Henderson	839	457.8	322	160.7
Hertford	134	405.2	59	174.3
Hoke	187	429.2	60	151.9
Hyde	27	341.2	14	198.2
Iredell	946	473.7	330	167.8
Jackson	199	382.3	80	154.3
Johnston	931	463.1	343	178.3
Jones	62	411.3	20	122.2
Lee	344	482.0	141	199.6
Lenoir	403	503.6	157	198.2
Lincoln	509	500.2	175	171.9
McDowell	301	488.2	115	188.1
Macon	274	455.6	105	169.3
Madison	129	414.5	49	152.1
Martin	191	518.1	77	197.8
Mecklenburg	4,482	463.7	1,298	143.1
Mitchell	113	446.5	48	175.2
Montgomery	138	365.6	56	157.0
Moore	512	349.6	228	141.3
Nash	553	468.0	216	178.7
New Hanover	1,215	464.8	438	164.0
Northampton	151	443.2	69	199.4
Onslow	724	519.7	265	198.7
Orange	665	466.0	182	139.6
Pamlico	118	540.7	48	198.8

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 3 (continued): 2015 Cancer Incidence and Mortality by County

	Incidence		Mortality	
	Cases	**Rate**	**Deaths**	**Rate**
Pasquotank	235	495.4	75	158.0
Pender	383	510.5	143	192.7
Perquimans	102	448.5	36	164.1
Person	233	434.8	96	175.0
Pitt	751	438.5	289	175.9
Polk	163	443.8	64	158.0
Randolph	951	523.0	298	164.4
Richmond	208	363.0	108	181.3
Robeson	628	416.9	254	178.4
Rockingham	712	547.2	255	189.9
Rowan	902	514.7	352	198.1
Rutherford	475	489.5	177	177.6
Sampson	421	535.2	155	196.8
Scotland	192	428.3	83	181.6
Stanly	362	446.6	146	183.1
Stokes	348	525.5	115	170.6
Surry	476	462.9	194	179.0
Swain	95	491.4	28	130.3
Transylvania	239	398.2	95	144.9
Tyrrell	23	383.4	10	171.1
Union	1,141	499.3	322	154.8
Vance	294	525.5	102	180.8
Wake	4,521	470.6	1,243	144.7
Warren	153	477.0	61	189.6
Washington	90	447.6	45	218.2
Watauga	273	468.3	81	139.1
Wayne	654	452.0	238	164.2
Wilkes	392	393.2	161	154.9
Wilson	442	419.9	182	172.0
Yadkin	235	462.4	105	199.6
Yancey	124	441.6	50	168.9

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 4: 2015 Ten Highest and Lowest Cancer Incidence and Mortality Rates by County

Incidence - Lowest Ten

	Cases	Rate
Hyde	27	341.2
Moore	512	349.6
Richmond	208	363.0
Montgomery	138	365.6
Jackson	199	382.3
Tyrrell	23	383.4
Wilkes	392	393.2
Transylvania	239	398.2
Anson	129	400.0
Hertford	134	405.2

Mortality - Lowest Ten

	Deaths	Rate
Chatham	141	111.5
Alleghany	21	115.4
Jones	20	122.2
Cherokee	58	122.5
Columbus	101	126.1
Swain	28	130.3
Greene	37	135.3
Watauga	81	139.1
Orange	182	139.6
Camden	17	139.9

Incidence - Highest Ten

	Cases	Rate
Camden	73	572.7
Dare	281	565.5
Haywood	531	554.7
Rockingham	712	547.2
Chowan	120	543.4
Pamlico	118	540.7
Sampson	421	535.2
Stokes	348	525.5
Vance	294	525.5
Alamance	1,039	525.0

Mortality - Highest Ten

	Deaths	Rate
Washington	45	218.2
Caswell	72	208.5
Ashe	88	202.9
Anson	67	200.2
Lee	141	199.6
Yadkin	105	199.6
Northampton	69	199.4
Pamlico	48	198.8
Onslow	265	198.7
Cleveland	255	198.7

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 5: 2015 Cancer Incidence and Mortality by Age Group

	Incidence				Mortality			
	0-19		20-44		0-19		20-44	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	473	18.5	4,074	123.1	56	2.2	497	15.0
Oral Cavity	13	0.5	114	3.4	1	0.0	7	0.2
Esophagus	0	0.0	11	0.3	0	0.0	9	0.3
Stomach	*	*	27	0.8	0	0.0	8	0.2
Colon and Rectum	11	0.4	286	8.6	0	0.0	68	2.1
Liver	*	*	27	0.8	2	0.1	16	0.5
Gallbladder	0	0.0	*	*	0	0.0	1	0.0
Pancreas	*	*	43	1.3	0	0.0	21	0.6
Larynx	0	0.0	14	0.4	0	0.0	1	0.0
Lung and Bronchus	0	0.0	107	3.2	1	0.0	34	1.0
Bone	26	1.0	18	0.5	6	0.2	6	0.2
Soft Tissue	27	1.1	49	1.5	5	0.2	22	0.7
Melanoma (Skin)	10	0.4	366	11.1	0	0.0	11	0.3
Female Breast	*	*	1,022	61.3	0	0.0	85	5.1
Cervix Uteri	0	0.0	143	8.6	0	0.0	23	1.4
Corpus Uteri	0	0.0	124	7.4	0	0.0	5	0.3
Ovary	5	0.4	82	4.9	0	0.0	9	0.5
Prostate	*	*	43	2.6	0	0.0	3	0.2
Testes	16	1.2	177	10.8	0	0.0	2	0.1
Urinary Bladder	*	*	38	1.1	0	0.0	2	0.1
Kidney	19	0.7	154	4.7	3	0.1	9	0.3
Endocrine	39	1.5	463	14.0	3	0.1	6	0.2
Multiple Myeloma	0	0.0	32	1.0	0	0.0	4	0.1
Leukemia	53	2.1	112	3.4	17	0.7	39	1.2
Brain and Other CNS	73	2.9	101	3.1	15	0.6	39	1.2
Hodgkin Disease	38	1.5	100	3.0	1	0.0	7	0.2
Non-Hodgkin Lymphoma	23	0.9	158	4.8	2	0.1	19	0.6
Other Cancers	108	4.2	259	7.8	0	0.0	41	1.2

Rates are per 100,000 persons.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
* Incidence counts less than five are suppressed.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 5 (continued): 2015 Cancer Incidence and Mortality by Age Group

	Incidence				Mortality			
	45-64		65 and above		45-64		65 and above	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	21,384	806.6	30,295	1997.4	5,301	200.0	13,455	887.1
Oral Cavity	729	27.5	674	44.4	112	4.2	156	10.3
Esophagus	192	7.2	277	18.3	171	6.5	252	16.6
Stomach	249	9.4	443	29.2	99	3.7	237	15.6
Colon and Rectum	1,758	66.3	2,325	153.3	486	18.3	1,093	72.1
Liver	547	20.6	484	31.9	339	12.8	488	32.2
Gallbladder	36	1.4	93	6.1	18	0.7	55	3.6
Pancreas	471	17.8	1,006	66.3	359	13.5	936	61.7
Larynx	212	8.0	236	15.6	48	1.8	100	6.6
Lung and Bronchus	2,611	98.5	5,420	357.4	1,505	56.8	3,924	258.7
Bone	21	0.8	24	1.6	9	0.3	23	1.5
Soft Tissue	124	4.7	129	8.5	35	1.3	79	5.2
Melanoma (Skin)	1,173	44.2	1,528	100.7	85	3.2	192	12.7
Female Breast	4,469	324.6	4,539	529.8	487	35.4	824	96.2
Cervix Uteri	152	11.0	75	8.8	40	2.9	47	5.5
Uterus (Corpus, NOS)	813	59.1	734	85.7	77	5.6	196	22.9
Ovary	247	17.9	324	37.8	111	8.1	283	33.0
Prostate	2,718	213.3	3,756	569.1	94	7.4	807	122.3
Testes	47	3.7	10	1.5	3	0.2	.	.
Urinary Bladder	556	21.0	1,639	108.1	70	2.6	400	26.4
Kidney	844	31.8	932	61.4	136	5.1	275	18.1
Endocrine	599	22.6	307	20.2	18	0.7	42	2.8
Multiple Myeloma	294	11.1	519	34.2	94	3.5	352	23.2
Leukemia	386	14.6	842	55.5	115	4.3	550	36.3
Brain and Other CNS	239	9.0	299	19.7	159	6.0	274	18.1
Hodgkin Disease	64	2.4	50	3.3	4	0.2	17	1.1
Non-Hodgkin Lymphoma	661	24.9	1,166	76.9	130	4.9	469	30.9
Other Cancers	1,172	44.2	2,464	162.5	497	18.7	1,384	91.3

Rates are per 100,000 persons.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system excludes benign cases.
* Incidence counts less than five are suppressed.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 6: 2015 Top Ten Cancer Incidence and Mortality by Age Group

Ages 0 to 19

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Brain and Other CNS	73	2.9	Leukemia	17	0.7
Leukemia	53	2.1	Brain and Other CNS	15	0.6
Endocrine	39	1.5	Bone	6	0.2
Hodgkin Disease	38	1.5	Soft Tissue	5	0.2
Testes	16	1.2	Endocrine	3	0.1
Soft Tissue	27	1.1	Kidney	3	0.1
Bone	26	1.0	Liver	2	0.1
Non-Hodgkin Lymphoma	23	0.9	Non-Hodgkin Lymphoma	2	0.1
Kidney	19	0.7	Oral Cavity	1	0.0
Oral Cavity	13	0.5	Lung and Bronchus	1	0.0

Ages 20 to 44

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	1,022	61.3	Female Breast	85	5.1
Endocrine	463	14.0	Colon and Rectum	68	2.1
Melanoma (Skin)	366	11.1	Cervix Uteri	23	1.4
Testes	177	10.8	Brain and Other CNS	39	1.2
Colon and Rectum	286	8.6	Leukemia	39	1.2
Cervix Uteri	143	8.6	Lung and Bronchus	34	1.0
Corpus Uteri	124	7.4	Soft Tissue	22	0.7
Ovary	82	4.9	Pancreas	21	0.6
Non-Hodgkin Lymphoma	158	4.8	Non-Hodgkin Lymphoma	19	0.6
Kidney	154	4.7	Liver	16	0.5

Rates are per 100,000 persons.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 6 (continued): 2015 Top Ten Cancer Incidence and Mortality by Age Group

Ages 45 to 64

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	4,469	324.6	Lung and Bronchus	1,505	56.8
Prostate	2,718	213.3	Female Breast	487	35.4
Lung and Bronchus	2,611	98.5	Colon and Rectum	486	18.3
Colon and Rectum	1,758	66.3	Pancreas	359	13.5
Corpus Uteri	813	59.1	Liver	339	12.8
Melanoma (Skin)	1,173	44.2	Ovary	111	8.1
Kidney	844	31.8	Prostate	94	7.4
Oral Cavity	729	27.5	Esophagus	171	6.5
Non-Hodgkin Lymphoma	661	24.9	Brain and Other CNS	159	6.0
Endocrine	599	22.6	Corpus Uteri	77	5.6

Ages 65 and above

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	3,756	569.1	Lung and Bronchus	3,924	258.7
Female Breast	4,539	529.8	Prostate	807	122.3
Lung and Bronchus	5,420	357.4	Female Breast	824	96.2
Colon and Rectum	2,325	153.3	Colon and Rectum	1,093	72.1
Urinary Bladder	1,639	108.1	Pancreas	936	61.7
Melanoma (Skin)	1,528	100.7	Leukemia	550	36.3
Corpus Uteri	734	85.7	Ovary	283	33.0
Non-Hodgkin Lymphoma	1,166	76.9	Liver	488	32.2
Pancreas	1,006	66.3	Non-Hodgkin Lymphoma	469	30.9
Kidney	932	61.4	Urinary Bladder	400	26.4

Rates are per 100,000 persons.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 7: 2015 Cancer Incidence and Mortality by Gender

	Incidence				Mortality			
	Males		Females		Males		Females	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	27,447	508.6	28,742	456.6	10,309	203.4	9,000	136.9
Oral Cavity and Pharynx	1,094	19.7	436	7.0	197	3.6	79	1.2
Lip	33	0.7	18	0.3	1	0.0	0	0.0
Tongue	354	6.3	113	1.8	51	0.9	23	0.4
Salivary Glands	91	1.9	58	1.0	18	0.4	7	0.1
Floor of Mouth	53	0.9	30	0.5	3	0.1	0	0.0
Nasopharynx	54	1.0	19	0.3	12	0.2	9	0.2
Oropharynx	63	1.1	14	0.2	28	0.5	4	0.1
Hypopharynx	75	1.3	13	0.2	10	0.2	0	0.0
Other Mouth and Pharynx	371	6.5	171	2.7	74	1.3	36	0.5
Digestive System	5,067	93.8	4,154	64.5	2,788	53.5	2,074	31.3
Esophagus	388	7.1	91	1.4	361	6.7	71	1.1
Stomach	434	8.0	286	4.4	203	3.9	141	2.2
Small Intestine	175	3.4	165	2.6	25	0.5	29	0.5
Colon and Rectum	2,225	41.4	2,153	33.8	864	17.2	778	11.8
Anus and Anal Canal	88	1.6	147	2.3	11	0.2	24	0.4
Liver and Intrahepatic Bile Duct	761	13.2	300	4.5	577	10.5	268	4.0
Gallbladder	45	0.9	88	1.3	29	0.6	45	0.7
Pancreas	801	15.3	722	11.0	670	12.8	646	9.7
Other Digestive Organs	150	2.9	202	3.2	48	1.0	72	1.1
Respiratory System	4,841	90.0	3,924	59.1	3,248	61.8	2,403	36.1
Larynx	359	6.4	103	1.6	123	2.3	26	0.4
Lung and Bronchus	4,361	81.2	3,773	56.8	3,101	59.0	2,363	35.5
Other Respiratory Organs	121	2.4	48	0.7	24	0.5	14	0.2
Bones and Joints	50	1.0	38	0.7	22	0.4	22	0.4
Soft Tissue including Heart	173	3.5	156	2.6	74	1.5	67	1.1
Malignant Melanoma of the Skin	1,791	34.4	1,278	21.4	183	3.8	105	1.6
Breast	90	1.6	10,032	160.8	14	0.3	1,396	21.6
Invasive Breast	78	1.4	8,284	132.6				
In Situ Breast	12	0.2	1,748	28.2				
Female Genital System	-	-	3,030	48.2	-	-	857	13.1
Cervix Uteri, Invasive	-	-	370	6.9	-	-	110	1.9
Uterus (Corpus, NOS)	-	-	1,671	25.5	-	-	278	4.1
Ovary	-	-	658	10.6	-	-	403	6.1
Other Female Genital Organs	-	-	331	5.2	-	-	66	1.0

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancers exclude benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 7 (continued): 2015 Cancer Incidence and Mortality by Gender

	Incidence				Mortality			
	Males		Females		Males		Females	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
Male Genital System	6,829	118.1	-	-	924	20.6	-	-
Prostate	6,517	111.6	-	-	904	20.1	-	-
Testis	250	5.3	-	-	5	0.1	-	-
Penis	48	1.0	-	-	11	0.2	-	-
Other Male Genital Organs	14	0.3	-	-	4	0.1	-	-
Urinary System	3,002	57.7	1,293	20.0	644	13.3	278	4.2
Urinary Bladder	1,686	33.4	546	8.3	337	7.2	135	2.1
Kidney and Renal Pelvis	1,241	22.8	707	11.1	290	5.7	133	1.9
Ureter	50	1.1	25	0.4	6	0.1	3	0.0
Other Urinary Organs	25	0.5	15	0.2	11	0.3	7	0.1
Eye and Orbit	38	0.7	34	0.5	7	0.1	5	0.1
Brain and Other CNS	391	7.6	321	5.4	283	5.5	204	3.2
Endocrine System	382	7.6	1,026	18.8	24	0.5	45	0.8
Thyroid Gland	337	6.7	990	18.2	15	0.3	28	0.5
Other Endocrine and Thymus	45	0.9	36	0.6	9	0.2	17	0.3
Lymphomas	1,208	23.4	1,038	16.5	358	7.3	291	4.5
Hodgkin Disease	151	3.1	101	1.9	14	0.3	15	0.3
Non-Hodgkin Lymphoma	1,057	20.3	937	14.6	344	7.0	276	4.2
Multiple Myeloma	456	8.8	388	5.9	227	4.6	223	3.4
Leukemia	835	16.5	558	8.8	438	9.2	283	4.4
Acute Lymphocytic Leukemia	23	0.5	12	0.3	30	0.6	20	0.3
Chronic Lymphocytic Leukemia	323	6.1	193	2.9	80	1.7	45	0.7
Acute Myeloid Leukemia	260	5.3	199	3.2	199	4.0	126	2.0
Chronic Myeloid Leukemia	137	2.7	83	1.4	23	0.5	20	0.3
Other Leukemia	92	1.9	71	1.1	106	2.2	72	1.1
Other Cancers – Uncategorized	3,214	63.2	2,508	40.9	878	17.6	668	10.0

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancers exclude benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 8: 2015 Top Ten Cancer Incidence and Mortality Sites by Gender

Males

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	6,517	111.6	Lung and Bronchus	3,101	59.0
Lung and Bronchus	4,361	81.2	Prostate	904	20.1
Colon and Rectum	2,225	41.4	Colon and Rectum	867	17.3
Melanoma (Skin)	1,791	34.4	Pancreas	670	12.8
Urinary Bladder	1,686	33.4	Liver	577	10.5
Kidney	1,241	22.8	Leukemia	438	9.2
Non-Hodgkin Lymphoma	1,068	20.5	Urinary Bladder	337	7.2
Oral Cavity	1,094	19.7	Non-Hodgkin Lymphoma	344	7.0
Leukemia	835	16.5	Esophagus	361	6.7
Pancreas	801	15.3	Kidney	290	5.7

Females

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	10,032	160.8	Lung and Bronchus	2,363	35.5
Lung and Bronchus	3,773	56.8	Female Breast	1,396	21.6
Colon and Rectum	2,153	33.8	Colon and Rectum	780	11.8
Corpus Uteri	1,671	25.5	Pancreas	646	9.7
Melanoma (Skin)	1,278	21.4	Ovary	403	6.1
Endocrine	1,026	18.8	Leukemia	283	4.4
Non-Hodgkin Lymphoma	940	14.7	Non-Hodgkin Lymphoma	276	4.2
Kidney	707	11.1	Corpus Uteri	278	4.1
Pancreas	722	11.0	Liver	268	4.0
Ovary	658	10.6	Multiple Myeloma	223	3.4

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancers exclude benign cases.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 9: 2015 Cancer Incidence and Mortality by Race

	Incidence				Mortality			
	Whites		Minorities		Whites		Minorities	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	42,982	467.7	12,195	463.6	14,825	159.1	4,306	176.5
Oral Cavity and Pharynx	1,247	13.4	260	9.4	209	2.2	65	2.3
Lip	44	0.5	*	*	1	0.0	0	0.0
Tongue	416	4.4	46	1.7	59	0.6	14	0.5
Salivary Glands	109	1.3	36	1.4	21	0.2	4	0.1
Floor of Mouth	66	0.7	17	0.6	3	0.0	0	0.0
Nasopharynx	46	0.5	27	1.0	10	0.1	11	0.4
Oropharynx	62	0.7	15	0.6	20	0.2	11	0.4
Hypopharynx	62	0.6	26	0.9	5	0.1	5	0.2
Other Mouth and Pharynx	442	4.7	90	3.1	90	0.9	20	0.7
Digestive System	6,729	72.7	2,374	91.3	3,567	38.3	1,250	50.7
Esophagus	368	3.8	100	3.9	358	3.7	71	2.7
Stomach	486	5.1	230	9.5	206	2.3	128	5.5
Small Intestine	229	2.5	108	4.2	36	0.4	18	0.7
Colon and Rectum	3,234	35.5	1,065	40.4	1,217	13.3	415	17.0
Anus and Anal Canal	194	2.1	41	1.4	27	0.3	8	0.3
Liver and Intrahepatic Bile Duct	734	7.6	316	10.8	622	6.5	216	7.9
Gallbladder	81	0.9	51	2.2	46	0.5	27	1.2
Pancreas	1,141	12.2	375	15.3	974	10.4	331	13.8
Other Digestive Organs	262	2.9	88	3.6	81	0.9	36	1.6
Respiratory System	6,978	73.0	1,751	68.1	4,549	47.8	1,077	42.7
Larynx	330	3.5	130	4.8	104	1.1	44	1.7
Lung and Bronchus	6,511	68.0	1,591	62.1	4,413	46.4	1,027	40.9
Other Respiratory Organs	137	1.5	30	1.1	32	0.3	6	0.2
Bones and Joints	64	0.9	23	0.9	32	0.4	10	0.4
Soft Tissue including Heart	256	3.0	72	2.8	99	1.1	36	1.4
Malignant Melanoma of the Skin	2,828	31.9	30	1.2	279	3.1	9	0.4
Breast	7,622	84.6	2,416	91.0	974	10.6	420	16.7
Invasive Breast	6,340	70.3	1,955	74.0				
In Situ Breast	1,282	14.3	461	17.0				
Female Genital System	2,293	48.4	703	46.5	622	12.2	226	16.1
Cervix Uteri, Invasive	249	6.6	115	7.7	70	1.7	37	2.7
Uterus (Corpus, NOS)	1,251	25.2	400	25.9	182	3.4	91	6.4
Ovary	531	11.3	125	8.4	314	6.1	88	6.3
Other Female Genital Organs	262	5.3	63	4.3	56	1.1	10	0.7

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancers exclude benign cases.
* Incidence counts less than five are suppressed.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 9 (continued): 2015 Cancer Incidence and Mortality by Race

	Incidence				Mortality			
	Whites		Minorities		Whites		Minorities	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
Male Genital System	4,644	101.5	1,906	161.0	638	17.3	274	36.0
Prostate	4,380	94.0	1,862	157.3	625	16.9	268	35.3
Testis	214	6.3	33	2.6	4	0.1	1	0.1
Penis	41	1.0	7	0.8	7	0.2	3	0.4
Other Male Genital Organs	9	0.2	*	*	2	0.1	2	0.2
Urinary System	3,478	37.4	786	30.5	747	8.1	167	6.9
Urinary Bladder	1,942	20.7	268	10.9	394	4.3	78	3.4
Kidney and Renal Pelvis	1,435	15.6	502	19.0	329	3.5	86	3.3
Ureter	72	0.8	*	*	8	0.1	1	0.0
Other Urinary Organs	29	0.3	12	0.4	16	0.2	2	0.1
Eye and Orbit	59	0.6	9	0.3	10	0.1	2	0.1
Brain and Other CNS	592	7.0	112	4.2	420	4.7	59	2.3
Endocrine System	1,092	14.0	294	11.0	43	0.5	26	1.1
Thyroid Gland	1,042	13.4	265	9.9	29	0.3	14	0.6
Other Endocrine and Thymus	50	0.6	29	1.1	14	0.2	12	0.5
Lymphomas	1,789	19.9	415	15.9	536	5.9	103	4.3
Hodgkin Disease	174	2.4	75	2.6	21	0.3	7	0.3
Non-Hodgkin Lymphoma	1,615	17.6	340	13.3	515	5.6	96	4.1
Multiple Myeloma	505	5.4	326	12.9	296	3.2	153	6.4
Leukemia	1,075	12.1	261	10.5	567	6.3	135	5.9
Acute Lymphocytic Leukemia	25	0.4	9	0.3	32	0.4	12	0.5
Chronic Lymphocytic Leukemia	410	4.3	71	2.9	106	1.2	17	0.8
Acute Myeloid Leukemia	344	3.9	109	4.5	265	2.9	51	2.1
Chronic Myeloid Leukemia	161	1.9	49	1.9	37	0.4	6	0.3
Other Leukemia	135	1.5	23	1.0	127	1.4	49	2.1
Other Cancers - Uncategorized	4,879	55.1	582	23.5	1,237	13.2	294	12.3

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancers exclude benign cases.
* Incidence counts less than five are suppressed.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 10: 2015 Top Ten Cancer Incidence and Mortality Sites by Race

Whites

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	7,542	158.7	Lung and Bronchus	4,413	46.4
Prostate	4,381	94.0	Female Breast	966	19.0
Lung and Bronchus	6,511	68.0	Prostate	625	16.9
Colon and Rectum	3,234	35.5	Colon and Rectum	1,221	13.4
Melanoma (Skin)	2,828	31.9	Pancreas	974	10.4
Corpus Uteri	1,251	25.2	Liver	622	6.5
Urinary Bladder	1,942	20.7	Leukemia	567	6.3
Non-Hodgkin Lymphoma	1,621	17.6	Ovary	314	6.1
Kidney	1,435	15.6	Non-Hodgkin Lymphoma	515	5.6
Endocrine	1,092	14.0	Brain and Other CNS	420	4.7

Minorities

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	2,396	159.5	Lung and Bronchus	1,027	40.9
Prostate	1,862	157.3	Prostate	268	35.3
Lung and Bronchus	1,591	62.1	Female Breast	415	28.2
Colon and Rectum	1,065	40.4	Colon and Rectum	416	17.1
Corpus Uteri	400	25.9	Pancreas	331	13.8
Kidney	502	19.0	Liver	216	7.9
Pancreas	375	15.3	Multiple Myeloma	153	6.4
Non-Hodgkin Lymphoma	348	13.6	Corpus Uteri	91	6.4
Multiple Myeloma	326	12.9	Ovary	88	6.3
Endocrine	294	11.0	Leukemia	135	5.9

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancers exclude benign cases.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 11: 2015 Top Ten Cancer Incidence and Mortality by Race and Gender

White Males

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	4,380	94.0	Lung and Bronchus	2,450	57.9
Lung and Bronchus	3,440	79.7	Prostate	625	16.9
Melanoma (Skin)	1,665	40.0	Colon and Rectum	650	16.2
Colon and Rectum	1,648	38.9	Pancreas	513	12.2
Urinary Bladder	1,489	36.2	Liver	422	9.7
Kidney	934	21.8	Leukemia	350	9.0
Non-Hodgkin Lymphoma	857	20.5	Urinary Bladder	292	7.6
Oral Cavity	890	20.2	Esophagus	308	7.1
Leukemia	659	16.3	Non-Hodgkin Lymphoma	287	7.1
Pancreas	624	14.8	Brain and Other CNS	249	6.2

White Females

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	7,542	158.7	Lung and Bronchus	1,963	37.5
Lung and Bronchus	3,069	59.1	Female Breast	966	19.0
Colon and Rectum	1,585	32.5	Colon and Rectum	571	11.0
Melanoma (Skin)	1,156	26.0	Pancreas	461	8.8
Corpus Uteri	1,251	25.2	Ovary	314	6.1
Endocrine	780	19.8	Non-Hodgkin Lymphoma	228	4.4
Non-Hodgkin Lymphoma	764	15.3	Leukemia	217	4.3
Ovary	531	11.3	Liver	200	3.8
Kidney	500	10.2	Brain and Other CNS	171	3.5
Pancreas	517	10.1	Corpus Uteri	182	3.4

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 11 (continued): 2015 Top Ten Cancer Incidence and Mortality by Race and Gender

Minority Males

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	1,862	157.3	Lung and Bronchus	639	62.4
Lung and Bronchus	897	84.4	Prostate	268	35.3
Colon and Rectum	529	46.8	Colon and Rectum	210	21.5
Kidney	298	25.6	Pancreas	152	14.9
Urinary Bladder	178	18.1	Liver	152	13.2
Non-Hodgkin Lymphoma	184	16.8	Stomach	80	8.6
Pancreas	173	16.7	Multiple Myeloma	77	8.3
Liver	217	16.6	Leukemia	76	8.3
Multiple Myeloma	167	16.3	Non-Hodgkin Lymphoma	50	5.1
Oral Cavity	190	15.9	Urinary Bladder	45	5.1

Minority Females

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	2,396	159.5	Female Breast	415	28.2
Lung and Bronchus	693	47.1	Lung and Bronchus	388	26.7
Colon and Rectum	535	35.7	Colon and Rectum	206	14.3
Corpus Uteri	400	25.9	Pancreas	179	12.7
Endocrine	230	15.6	Corpus Uteri	91	6.4
Kidney	204	14.1	Ovary	88	6.3
Pancreas	202	14.1	Multiple Myeloma	76	5.3
Non-Hodgkin Lymphoma	164	11.3	Leukemia	59	4.3
Multiple Myeloma	159	10.7	Liver	64	4.1
Ovary	125	8.4	Stomach	48	3.5

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 12: 2010 – 2015 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

White Males

Incidence			Mortality		
Ages 0 to 19					
	Cases	**Rate**		**Deaths**	**Rate**
Brain and Other CNS	163	3.7	Brain and Other CNS	34	0.8
Leukemia	91	2.0	Leukemia	26	0.6
Hodgkin Disease	61	1.4	Soft Tissue	17	0.4
Testes	53	1.2	Endocrine	12	0.3
Soft Tissue	52	1.2	Bone	12	0.3
Ages 20 to 44					
	Cases	**Rate**		**Deaths**	**Rate**
Testes	716	12.2	Colon and Rectum	112	1.9
Melanoma (Skin)	671	11.5	Brain and Other CNS	104	1.8
Colon and Rectum	497	8.5	Lung and Bronchus	92	1.6
Endocrine	387	6.6	Leukemia	64	1.1
Kidney	359	6.1	Melanoma (Skin)	48	0.8
Ages 45 to 64					
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	8,922	187.3	Lung and Bronchus	3,377	70.9
Lung and Bronchus	5,082	106.7	Colon and Rectum	923	19.4
Colon and Rectum	3,103	65.2	Liver	831	17.4
Melanoma (Skin)	2,686	56.4	Pancreas	731	15.3
Oral Cavity	2,210	46.4	Esophagus	549	11.5
Ages 65 and above					
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	13,442	534.0	Lung and Bronchus	9,121	362.3
Lung and Bronchus	11,826	469.8	Prostate	2,703	107.4
Urinary Bladder	5,457	216.8	Colon and Rectum	1,962	77.9
Colon and Rectum	4,544	180.5	Pancreas	1,625	64.6
Melanoma (Skin)	4,239	168.4	Leukemia	1,292	51.3

Rates are per 100,000 persons.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 12 (continued): 2010 – 2015 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

White Females

Incidence			Mortality		
Ages 0 to 19					
	Cases	**Rate**		**Deaths**	**Rate**
Brain and Other CNS	132	3.1	Leukemia	19	0.4
Endocrine	70	1.7	Brain and Other CNS	19	0.4
Leukemia	48	1.1	Endocrine	8	0.2
Kidney	43	1.0	Bone	8	0.2
Bone	39	0.9	Soft Tissue	5	0.1
Ages 20 to 44					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	3,274	57.1	Female Breast	215	3.7
Endocrine	1,337	23.3	Lung and Bronchus	85	1.5
Melanoma (Skin)	991	17.3	Colon and Rectum	84	1.5
Cervix Uteri	533	9.3	Cervix Uteri	81	1.4
Colon and Rectum	458	8.0	Brain and Other CNS	64	1.1
Ages 45 to 64					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	16,187	324.8	Lung and Bronchus	2,435	48.9
Lung and Bronchus	4,312	86.5	Female Breast	1,509	30.3
Corpus Uteri	2,873	57.7	Colon and Rectum	635	12.7
Colon and Rectum	2,423	48.6	Pancreas	487	9.8
Melanoma (Skin)	2,040	40.9	Ovary	451	9.1
Ages 65 and above					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	16,918	527.2	Lung and Bronchus	7,095	221.1
Lung and Bronchus	10,048	313.1	Female Breast	2,951	92.0
Colon and Rectum	4,578	142.7	Colon and Rectum	1,941	60.5
Corpus Uteri	2,584	80.5	Pancreas	1,655	51.6
Non-Hodgkin Lymphoma	2,203	68.7	Ovary	1,206	37.6

Rates are per 100,000 persons.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 12 (continued): 2010 – 2015 Top Five Cancer Incidence and Mortality Sites by Age Group, Race and Gender

Minority Males

Incidence			Mortality		
Ages 0 to 19					
	Cases	**Rate**		**Deaths**	**Rate**
Brain and Other CNS	54	2.6	Brain and Other CNS	14	0.7
Leukemia	43	2.1	Leukemia	11	0.5
Non-Hodgkin Lymphoma	29	1.4	Endocrine	8	0.4
Bone	21	1.0	Bone	4	0.2
Hodgkin Disease	20	1.0	Soft Tissue	3	0.1
Ages 20 to 44					
	Cases	**Rate**		**Deaths**	**Rate**
Colon and Rectum	180	7.9	Colon and Rectum	49	2.1
Non-Hodgkin Lymphoma	142	6.2	Non-Hodgkin Lymphoma	26	1.1
Kidney	113	4.9	Lung and Bronchus	25	1.1
Testes	97	4.2	Leukemia	23	1.0
Prostate	92	4.0	Soft Tissue	21	0.9
Ages 45 to 64					
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	4,785	322.3	Lung and Bronchus	1,254	84.5
Lung and Bronchus	1,798	121.1	Colon and Rectum	434	29.2
Colon and Rectum	1,272	85.7	Liver	431	29.0
Liver	644	43.4	Pancreas	311	20.9
Kidney	634	42.7	Prostate	212	14.3
Ages 65 and above					
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	4,420	861.0	Lung and Bronchus	2,001	389.8
Lung and Bronchus	2,558	498.3	Prostate	1,099	214.1
Colon and Rectum	1,086	211.6	Colon and Rectum	559	108.9
Urinary Bladder	585	114.0	Pancreas	390	76.0
Kidney	514	100.1	Liver	234	45.6

Rates are per 100,000 persons.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Table 12 (continued): 2010-2014 Top Five Cancer Incidence and Mortality Sites by Age, Race, and Gender

Minority Females

Incidence			Mortality		
Ages 0 to 19					
	Cases	**Rate**		**Deaths**	**Rate**
Brain and Other CNS	48	2.4	Brain and Other CNS	9	0.4
Endocrine	30	1.5	Leukemia	6	0.3
Leukemia	23	1.1	Bone	6	0.3
Hodgkin Disease	21	1.0	Endocrine	2	0.1
Soft Tissue	19	0.9	Kidney	1	0.0
			Soft Tissue	1	0.0
Ages 20 to 44					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	1,534	60.4	Female Breast	181	7.1
Endocrine	359	14.1	Colon and Rectum	42	1.7
Cervix Uteri	194	7.6	Lung and Bronchus	29	1.1
Colon and Rectum	184	7.2	Cervix Uteri	28	1.1
Corpus Uteri	157	6.2	Non-Hodgkin Lymphoma	25	1.0
Ages 45 to 64					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	5,809	328.8	Female Breast	884	50.0
Lung and Bronchus	1,277	72.3	Lung and Bronchus	723	40.9
Colon and Rectum	1,099	62.2	Colon and Rectum	337	19.1
Corpus Uteri	855	48.4	Pancreas	231	13.1
Endocrine	504	28.5	Corpus Uteri	156	8.8
Ages 65 and above					
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	3,954	510.5	Lung and Bronchus	1,246	160.9
Lung and Bronchus	1,787	230.7	Female Breast	783	101.1
Colon and Rectum	1,188	153.4	Colon and Rectum	599	77.3
Corpus Uteri	828	106.9	Pancreas	515	66.5
Pancreas	592	76.4	Corpus Uteri	333	43.0

Rates are per 100,000 persons.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer exclude benign cases.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.
Rates based on counts less than 16 are unstable and should be used with caution.

Table 13: 2015 Cancer Incidence and Mortality by Race and Ethnicity

	Incidence				Mortality			
	Non-Hispanic Whites		Non-Hispanic Blacks		Non-Hispanic Whites		Non-Hispanic Blacks	
	Cases	**Rate**	**Cases**	**Rate**	**Deaths**	**Rate**	**Deaths**	**Rate**
All Cancers	41,993	477.0	10,710	478.9	14,659	162.3	3,912	186.0
Oral Cavity	1,224	13.8	215	9.2	204	2.2	52	2.1
Esophagus	360	3.9	92	4.2	355	3.8	65	3.0
Stomach	470	5.1	194	9.3	198	2.2	111	5.4
Colon and Rectum	3,161	36.2	948	42.3	1,208	13.7	380	18.1
Liver	708	7.6	264	10.5	611	6.6	189	8.0
Gallbladder	74	0.8	39	1.9	44	0.5	24	1.2
Pancreas	1,119	12.3	342	16.1	967	10.7	300	14.4
Larynx	324	3.6	117	5.0	102	1.1	39	1.7
Lung and Bronchus	6,416	69.1	1,424	64.5	4,382	47.3	932	42.8
Bone	61	0.9	14	0.6	32	0.4	10	0.5
Soft Tissue	248	3.1	54	2.6	94	1.1	33	1.5
Melanoma (Skin)	2,811	33.6	20	0.9	279	3.2	8	0.4
Female Breast	7,383	162.8	2,086	164.5	954	19.5	379	30.1
Cervix Uteri	227	6.5	95	7.6	70	1.8	34	2.9
Uterus (Corpus, NOS)	1,213	25.5	351	26.6	180	3.4	85	6.9
Ovary	515	11.6	98	7.9	311	6.2	74	6.1
Prostate	4,287	94.9	1,711	169.9	622	17.2	260	39.9
Testes	202	6.8	20	2.0	4	0.1	1	0.1
Urinary Bladder	1,921	21.1	235	11.0	390	4.4	69	3.5
Kidney	1,396	15.9	450	20.1	323	3.5	82	3.7
Endocrine	1,029	14.4	225	10.3	42	0.5	22	1.1
Multiple Myeloma	490	5.4	305	14.1	292	3.3	145	7.0
Leukemia	1,044	12.2	234	11.0	559	6.5	118	5.9
Brain and Other CNS	570	7.2	91	4.1	415	4.9	51	2.3
Hodgkin Disease	164	2.5	60	2.6	20	0.3	7	0.3
Non-Hodgkin Lymphoma	1,565	17.7	292	13.4	509	5.7	86	4.2
Other Cancers	3,011	34.4	734	34.5	1,492	16.5	356	17.4

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer exclude benign cases.
* Incidence counts less than five are suppressed.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.
Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.
Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated (Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2009;36(1):7-11.).

Table 13 (continued): 2015 Cancer Incidence and Mortality by Race and Ethnicity

	Incidence				Mortality			
	Non-Hispanic Other Races		Hispanics		Non-Hispanic Other Races		Hispanics	
	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate
All Cancers	2,162	661.2	1,360	340.7	371	129.3	367	124.7
Oral Cavity	57	17.8	34	7.5	11	3.9	9	2.7
Esophagus	19	6.3	9	3.2	4	1.2	8	3.0
Stomach	34	12.1	22	5.5	15	6.3	20	5.0
Colon and Rectum	165	48.5	106	27.1	32	10.5	27	10.4
Liver	45	13.3	45	11.0	27	8.9	18	6.0
Gallbladder	10	3.8	10	2.7	2	1.1	4	1.5
Pancreas	28	10.1	34	11.9	30	10.8	19	7.5
Larynx	14	3.6	7	3.1	4	1.2	4	1.3
Lung and Bronchus	185	60.9	113	39.9	87	31.2	63	23.3
Bone	10	2.6	*	*	0	0.0	2	0.4
Soft Tissue	15	4.5	12	1.9	4	0.9	10	1.9
Melanoma (Skin)	226	67.4	19	4.6	0	0.0	1	0.6
Female Breast	330	172.4	233	97.5	33	19.2	30	17.0
Cervix Uteri	16	7.9	32	11.2	3	1.9	3	1.6
Uterus (Corpus, NOS)	57	28.1	50	20.7	7	3.5	6	3.1
Ovary	26	12.6	19	8.7	12	7.0	6	5.2
Prostate	385	263.4	135	93.5	9	9.3	13	10.9
Testes	13	5.6	15	3.0	0	0.0	0	0.0
Urinary Bladder	46	16.0	32	11.3	7	2.6	6	2.4
Kidney	49	13.9	54	14.4	7	2.0	11	3.9
Endocrine	69	17.5	85	12.9	3	1.3	2	0.7
Multiple Myeloma	31	11.4	19	4.5	8	3.5	5	1.7
Leukemia	78	28.4	37	9.2	18	6.6	26	9.0
Brain and Other CNS	22	6.7	29	4.7	8	2.9	13	2.9
Hodgkin Disease	14	3.2	14	2.1	0	0.0	2	1.2
Non-Hodgkin Lymphoma	72	23.0	79	21.1	9	2.7	16	5.8
Other Cancers	146	49.9	112	26.4	31	10.1	43	13.8

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
* Incidence counts less than five are suppressed.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.
Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.
Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated (Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2009;36(1):7-11.).

Table 14: 2015 Top Ten Cancer Incidence and Mortality Sites by Race and Ethnicity

Non-Hispanic Whites

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Female Breast	7,383	162.8	Lung and Bronchus	4,382	47.3
Prostate	4,287	94.9	Female Breast	954	19.5
Lung and Bronchus	6,416	69.1	Prostate	622	17.2
Colon and Rectum	3,161	36.2	Colon and Rectum	1,208	13.7
Melanoma (Skin)	2,811	33.6	Pancreas	967	10.7
Corpus Uteri	1,213	25.5	Liver	611	6.6
Urinary Bladder	1,921	21.1	Leukemia	559	6.5
Non-Hodgkin Lymphoma	1,565	17.7	Non-Hodgkin Lymphoma	509	5.7
Kidney	1,396	15.9	Brain and Other CNS	415	4.9
Oral Cavity	1,224	13.8	Urinary Bladder	390	4.4

Non-Hispanic Blacks

Incidence			Mortality		
	Cases	**Rate**		**Deaths**	**Rate**
Prostate	1,711	169.9	Lung and Bronchus	932	42.8
Female Breast	2,086	164.5	Prostate	260	39.9
Lung and Bronchus	1,424	64.5	Female Breast	379	30.1
Colon and Rectum	948	42.3	Colon and Rectum	380	18.1
Corpus Uteri	351	26.6	Pancreas	300	14.4
Kidney	450	20.1	Liver	189	8.0
Pancreas	342	16.1	Multiple Myeloma	145	7.0
Multiple Myeloma	305	14.1	Leukemia	118	5.9
Non-Hodgkin Lymphoma	292	13.4	Stomach	111	5.4
Liver	264	10.5	Non-Hodgkin Lymphoma	86	4.2

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.
Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.
Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated (Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2009;36(1):7-11.).

Table 14 (continued): 2015 Top Ten Cancer Incidence and Mortality Sites by Race and Ethnicity

Non-Hispanic Other Races

Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Prostate	385	263.4	Lung and Bronchus	87	31.2
Female Breast	330	172.4	Female Breast	33	19.2
Melanoma (Skin)	226	67.4	Pancreas	30	10.8
Lung and Bronchus	185	60.9	Colon and Rectum	32	10.5
Colon and Rectum	165	48.5	Prostate	9	9.3
Leukemia	78	28.4	Liver	27	8.9
Corpus Uteri	57	28.1	Ovary	12	7.0
Non-Hodgkin Lymphoma	72	23.0	Leukemia	18	6.6
Oral Cavity	57	17.8	Stomach	15	6.3
Endocrine	69	17.5	Oral Cavity	11	3.9

Hispanics

Incidence			Mortality		
	Cases	Rate		Deaths	Rate
Female Breast	233	97.5	Lung and Bronchus	63	23.3
Prostate	135	93.5	Female Breast	30	17.0
Lung and Bronchus	113	39.9	Prostate	13	10.9
Colon and Rectum	106	27.1	Colon and Rectum	27	10.4
Non-Hodgkin Lymphoma	79	21.1	Leukemia	26	9.0
Corpus Uteri	50	20.7	Pancreas	19	7.5
Kidney	54	14.4	Liver	18	6.0
Endocrine	85	12.9	Non-Hodgkin Lymphoma	16	5.8
Liver	45	11.0	Stomach	20	5.0
Leukemia	37	9.2	Brain and Other CNS	13	2.9

Rates are per 100,000 persons and are age-adjusted to the 2000 U.S. Census.
Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
Rates based on counts less than 16 are unstable and should be used with caution.
Rates are calculated using the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.
Hispanic ethnicity is independent of race. Hispanic ethnicity is determined by self-report and the National Hispanic Identification Algorithm available online at www.naaccr.org/LinkClick.aspx?fileticket=iTvgbzLrx8I%3d&tabid=118&mid=458.
Approximately 17 percent of patients of American Indian race are reported as a different race. Therefore, cancer incidence for American Indians is assumed to be underestimated (Yankaskas BC, Knight K, Fleg A, Rao, C. Misclassification of American Indian Race in State Cancer Data among Non-federally Recognized Indians in North Carolina. *Journal of Registry Management*. 2009;36(1):7-11.).

Table 15: 2014 Cancer Incidence and Mortality Median Age

Incidence

	All	Males	Females	Non-Hispanic Whites	Non-Hispanic Blacks	Non-Hispanic Others	Hispanics
All Cancers	66	66	65	67	63	64	56
Oral Cavity	62	62	62.5	63	60	59	55.5
Esophagus	67	66	68	67	63.5	68	67
Stomach	68	67	69	68	68	67	60
Colon and Rectum	66	64	67	67	63	61	57
Liver	63	63	65	65	62	62	58
Gallbladder	71	71	71.5	73	70	73	59
Pancreas	70	69	71	71	66	69.5	67.5
Larynx	65	65	65	65	65	60	75
Lung and Bronchus	69	69	69	70	67	67	66
Bone	46	48.5	42.5	48	44	50.5	*
Soft Tissue	60	60	59	62	50	59	41
Melanoma (Skin)	64	67	60	65	63	62	57
Female Breast	63	.	63	64	60	59	51
Cervix Uteri	50	.	50	49	55	47.5	41.5
Uterus (Corpus, NOS)	63	.	63	63	64	58	51
Ovary	64	.	64	65	65.5	56	57
Prostate	66	66	.	67	64	67	65
Testes	33	33	.	33	34.5	31	29
Urinary Bladder	72	72	71	72	68	69.5	65.5
Kidney	64	63	65	64	62	61	56.5
Endocrine	51	53.5	50	52	53	45	43
Multiple Myeloma	68	68	68	70	66	71	61
Leukemia	68	68	68	69	64	71.5	45
Brain & Other CNS	61	61	61	63	56	50	38
Hodgkin Disease	40.5	42	34	42	42	32	27
Non-Hodgkin Lymphoma	67	67	68	69	61	64.5	58
Other Cancers	68	68	68	70	64	66	50

Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
*Median ages based on incidence counts less than five are suppressed.

Table 15 (continued): 2014 Cancer Incidence and Mortality Median Age

	Mortality						
	All	**Males**	**Females**	**Non-Hispanic Whites**	**Non-Hispanic Blacks**	**Non-Hispanic Others**	**Hispanics**
All Cancers	71	71	72	72	68	69	65
Oral Cavity	66.5	65	69	68	63.5	63	63
Esophagus	67	67	70	68	62	67	76.5
Stomach	70	68	76	73	68	72	61
Colon and Rectum	71	69	74	73	67	64.5	69
Liver	67	66	68.5	68	63	66	63
Gallbladder	74	74	74	73.5	75	82	66
Pancreas	71	70	73	72	69	71	71
Larynx	68	67	69.5	70	67	68	63
Lung and Bronchus	71	70	72	71	68	69	68
Bone	65	61	68	63	73	.	57
Soft Tissue	67	67.5	67	70	61	55	42.5
Melanoma (Skin)	73	73	73	73	75	.	.
Female Breast	68	.	68	70	63	63	59.5
Cervix Uteri	58.5	.	58.5	56.5	69.5	70	67
Uterus(Corpus,NOS)	70	.	70	70.5	69	60	63.5
Ovary	71	.	71	71	73	67.5	79
Prostate	79	79	.	80	76.5	74	68
Testes	47	47	.	45	61	.	.
Urinary Bladder	77	77	77	77	74	70	67.5
Kidney	69	69	71	71	64	67	62.5
Endocrine	69	61.5	73	70	67	79	56.5
Multiple Myeloma	75	73	76	76	69	78	66
Leukemia	75	74	77	76	70	71	66
Brain & Other CNS	67	66	68	69	62	51	59
Hodgkin Disease	68	66.5	70	70	62	.	85
Non-Hodgkin Lymphoma	75	73	77	76	67	57	68
Other Cancers	73	71	74	74	69	65	63

Cancers of the urinary bladder and female breast include *in situ* cases.
Brain and other central nervous system cancer excludes benign cases.
*Median ages based on incidence counts less than five are suppressed.

Figure 1a: 2004 – 2015 Colorectal Cancer Incidence Trends by Gender and Race

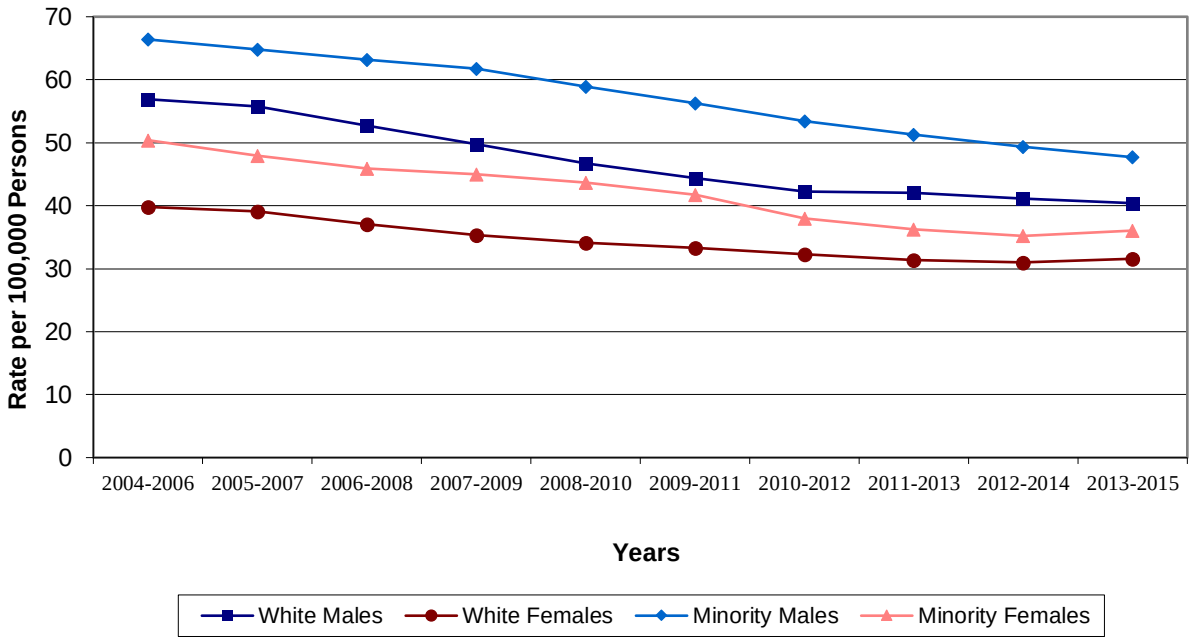


Figure 1b: 2004 – 2015 Colorectal Cancer Mortality Trends by Gender and Race

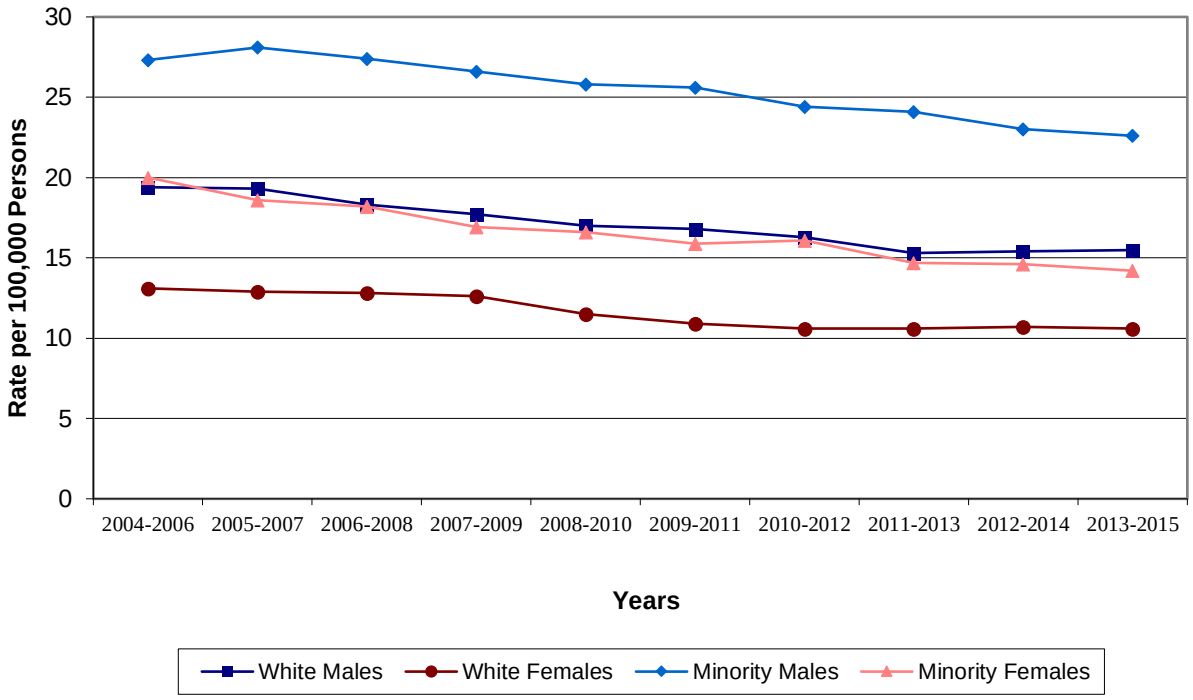


Figure 2a: 2004 – 2015 Lung and Bronchus Cancer Incidence Trends by Gender and Race

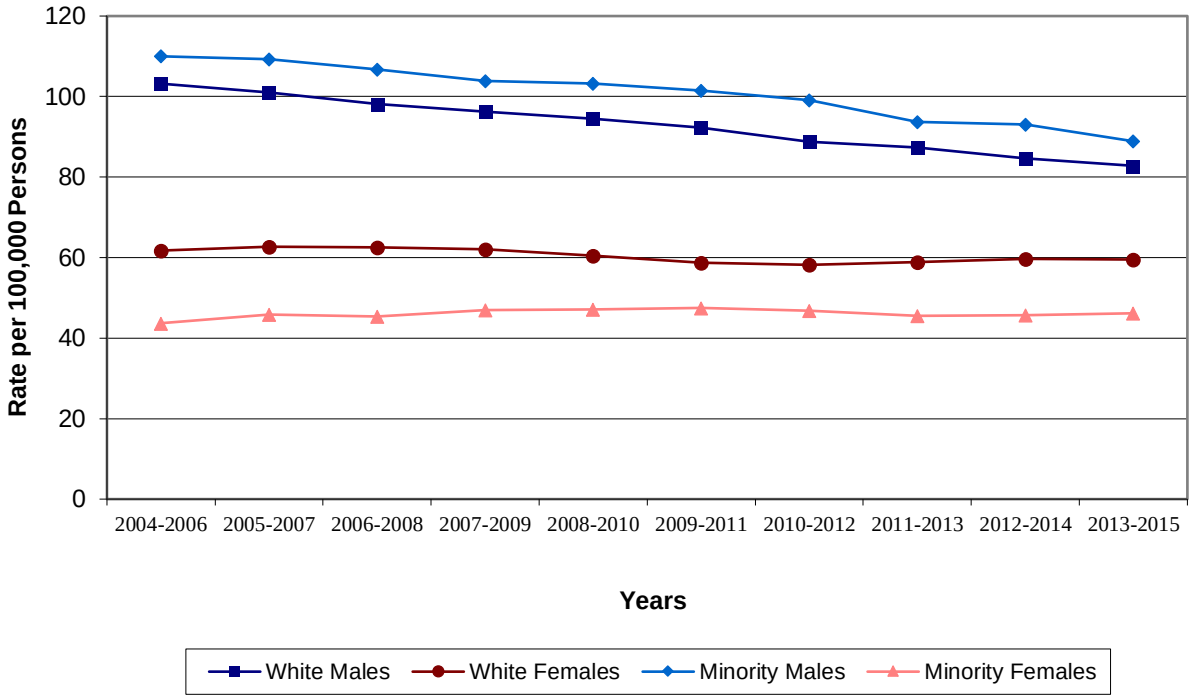


Figure 2b: 2004 – 2015 Lung and Bronchus Cancer Mortality Trends by Gender and Race

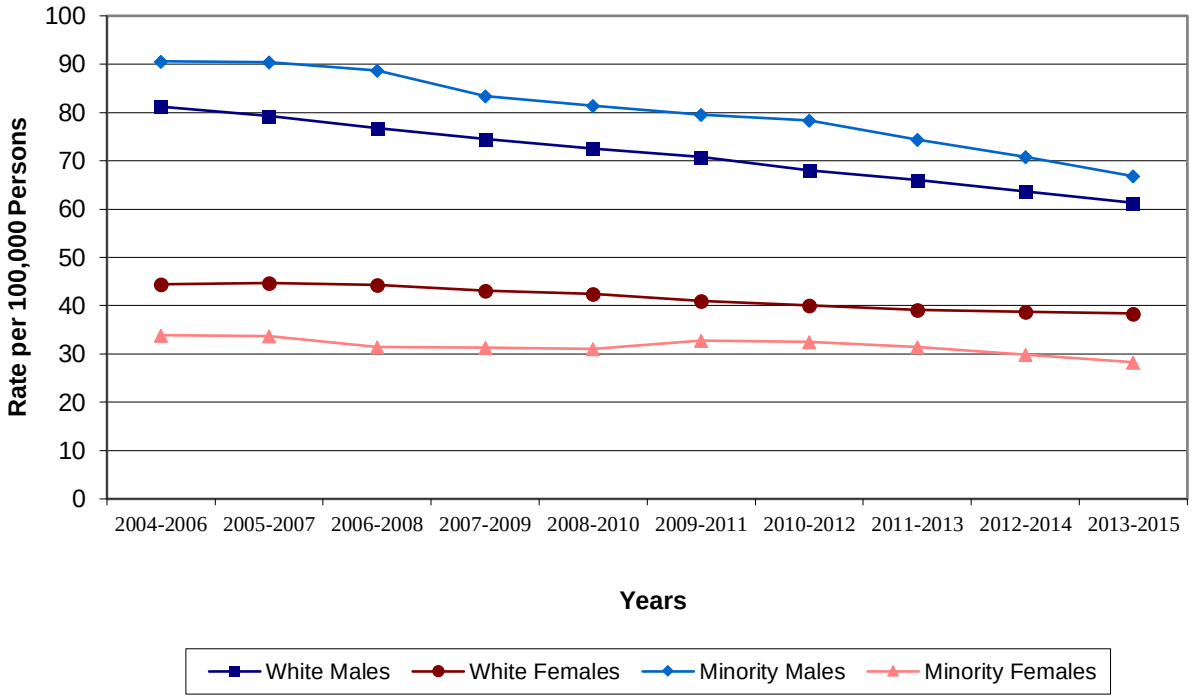


Figure 3a: 2004 – 2015 Female Breast Cancer Incidence Trends by Race

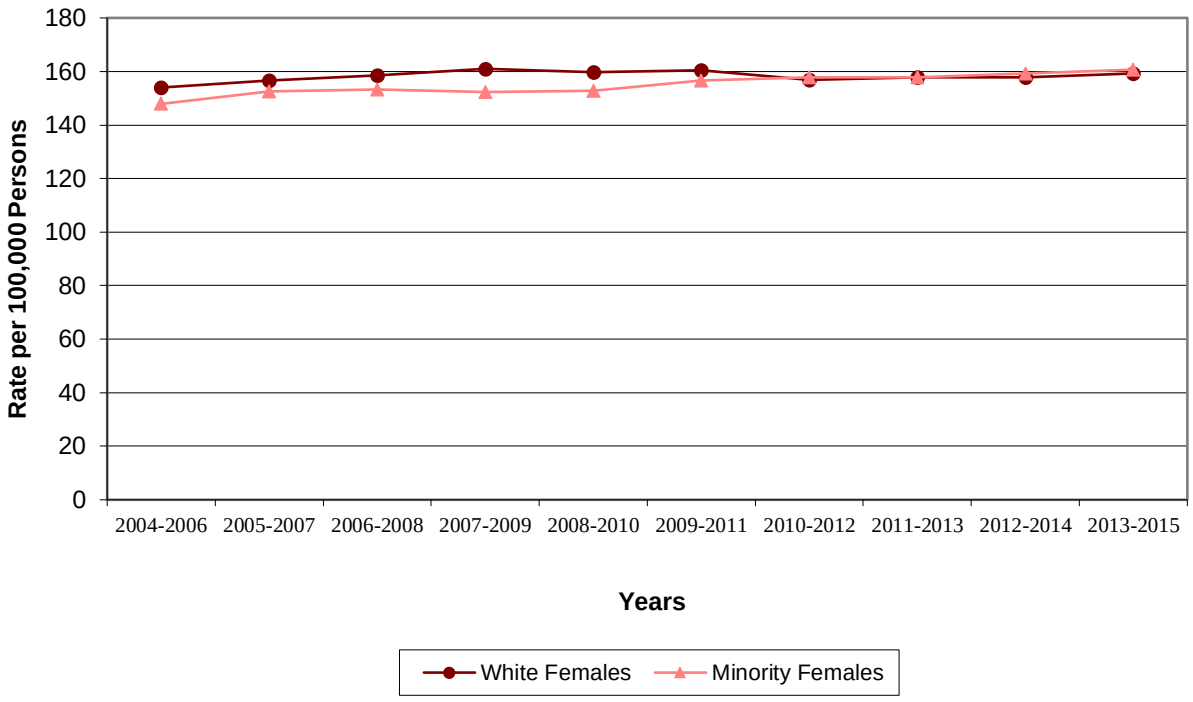


Figure 3b: 2004 – 2015 Female Breast Cancer Mortality Trends by Race

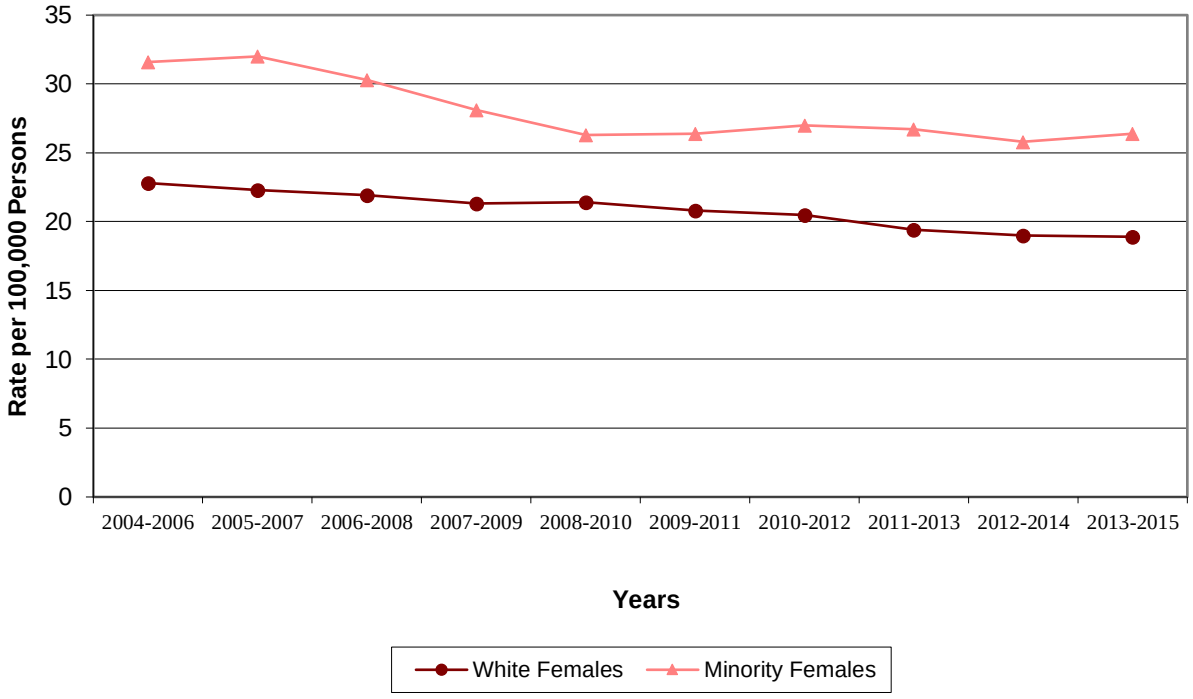


Figure 4a: 2004 – 2015 Prostate Cancer Incidence Trends by Race

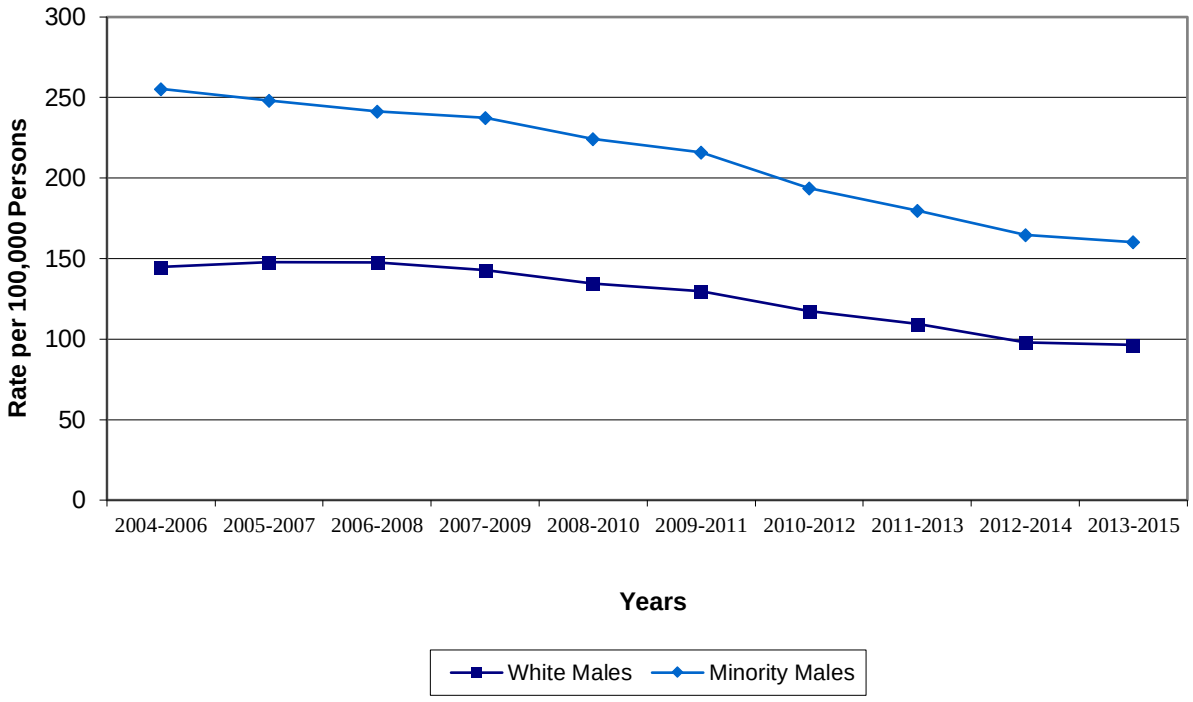


Figure 4b: 2004 – 2015 Prostate Cancer Mortality Trends by Race

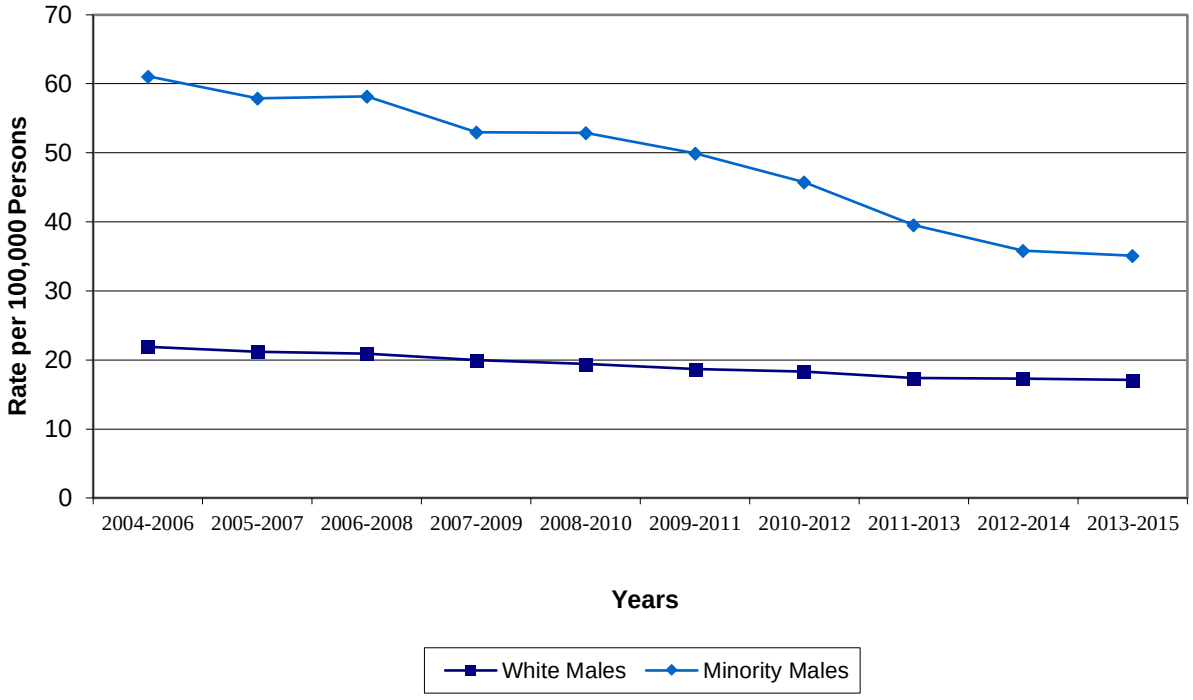


Figure 5a: 2004 – 2015 Cervical Cancer Incidence Trends by Race

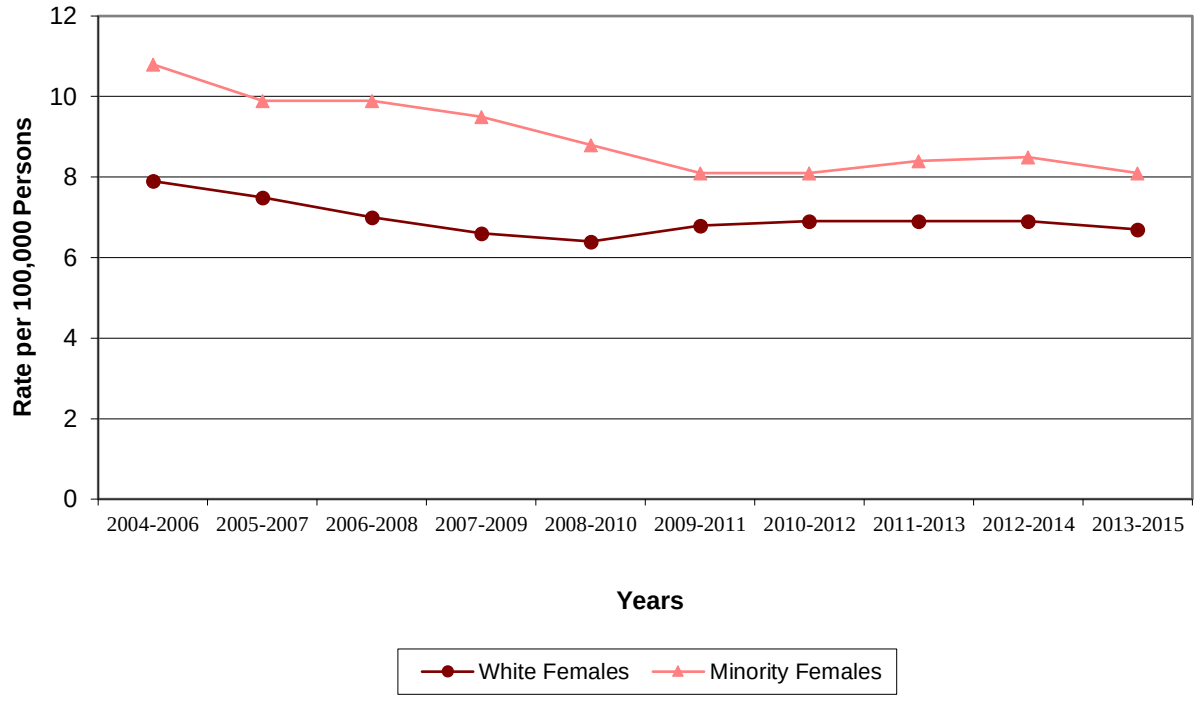


Figure 5b: 2004 – 2015 Cervical Cancer Mortality Trends by Race

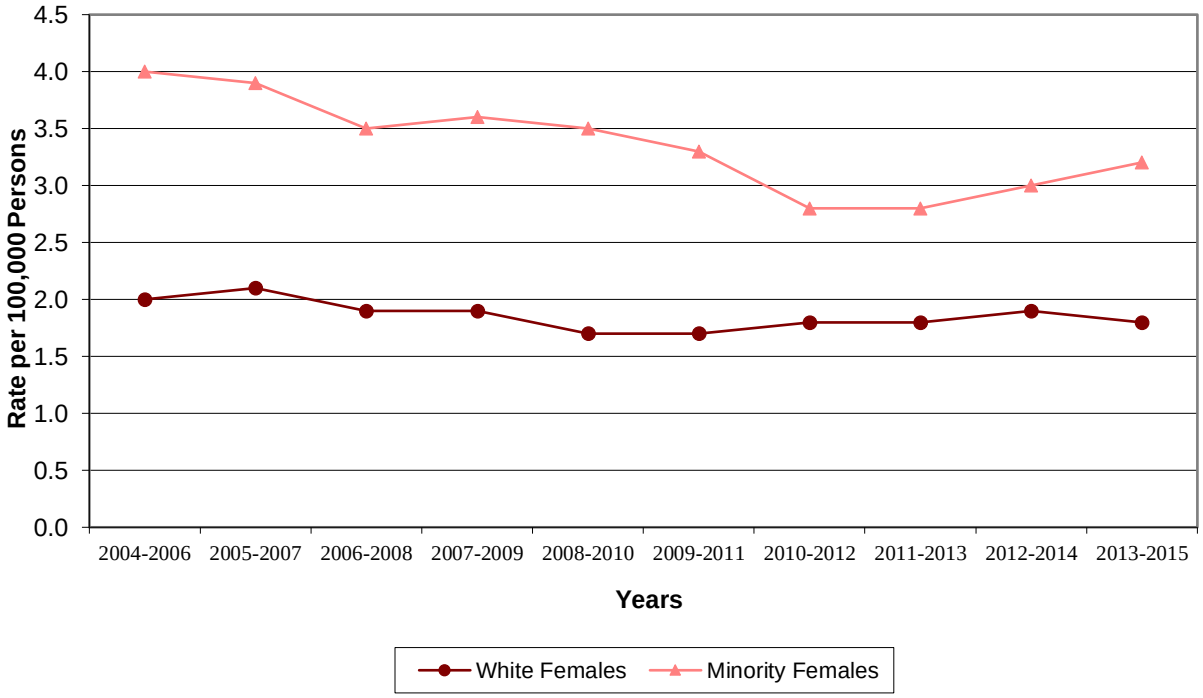


Figure 6: 2004 – 2015 Oral Cavity Cancer Incidence Trends by Gender and Race

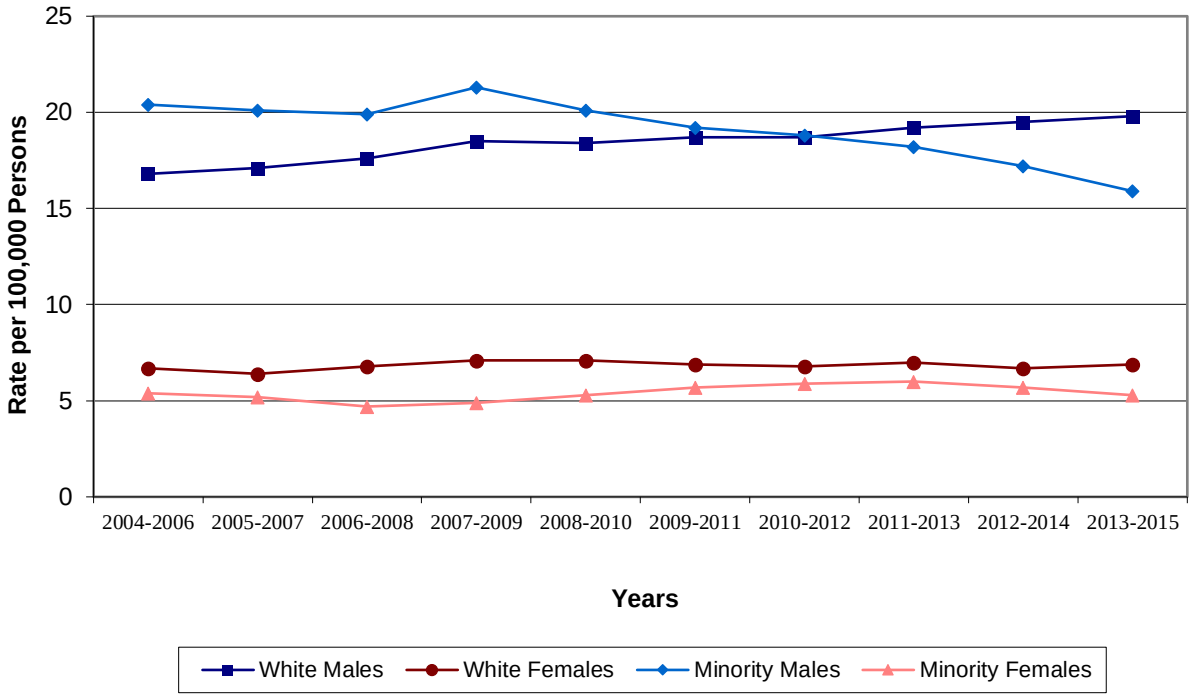


Figure 7: 2004 – 2015 Laryngeal Cancer Incidence Trends by Gender and Race

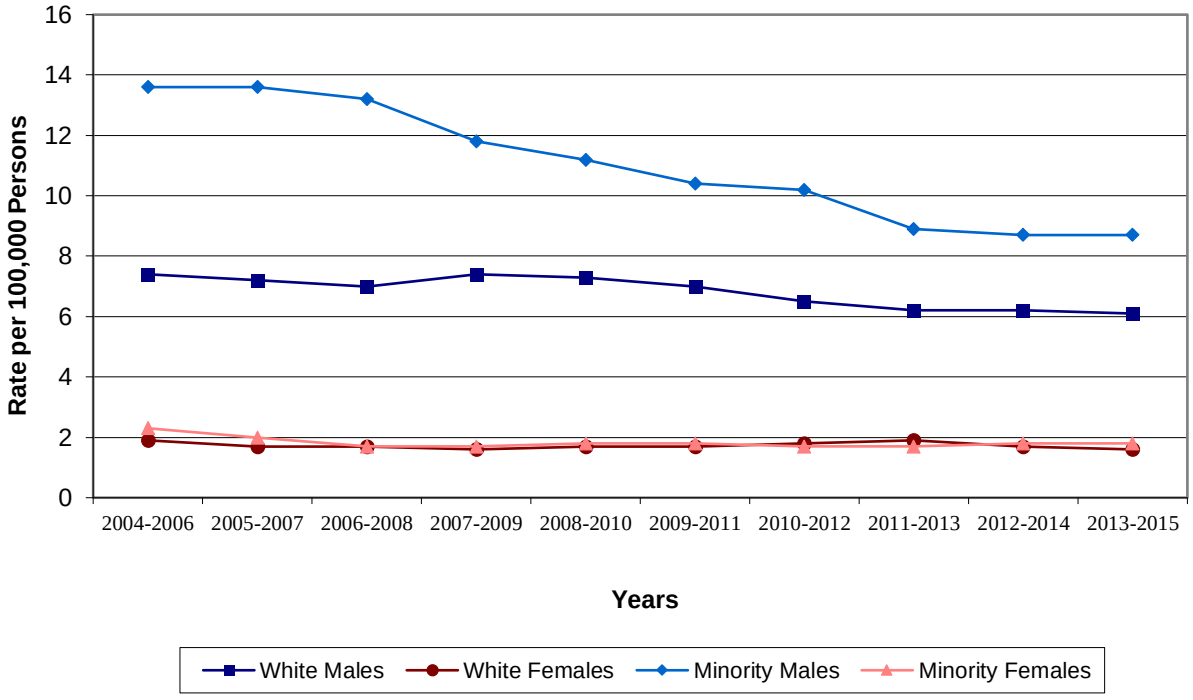


Figure 8: 2004 – 2015 Melanoma Incidence Trends by Gender and Race

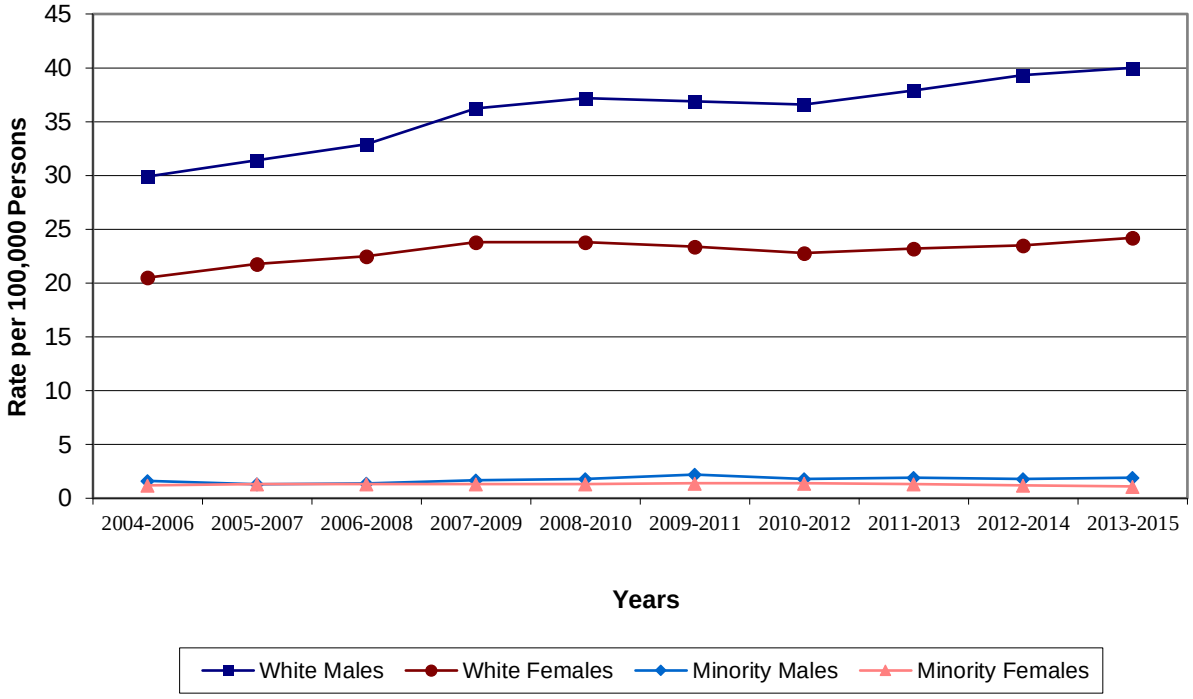


Figure 9: 2004 – 2015 Kidney Cancer Incidence Trends by Gender and Race

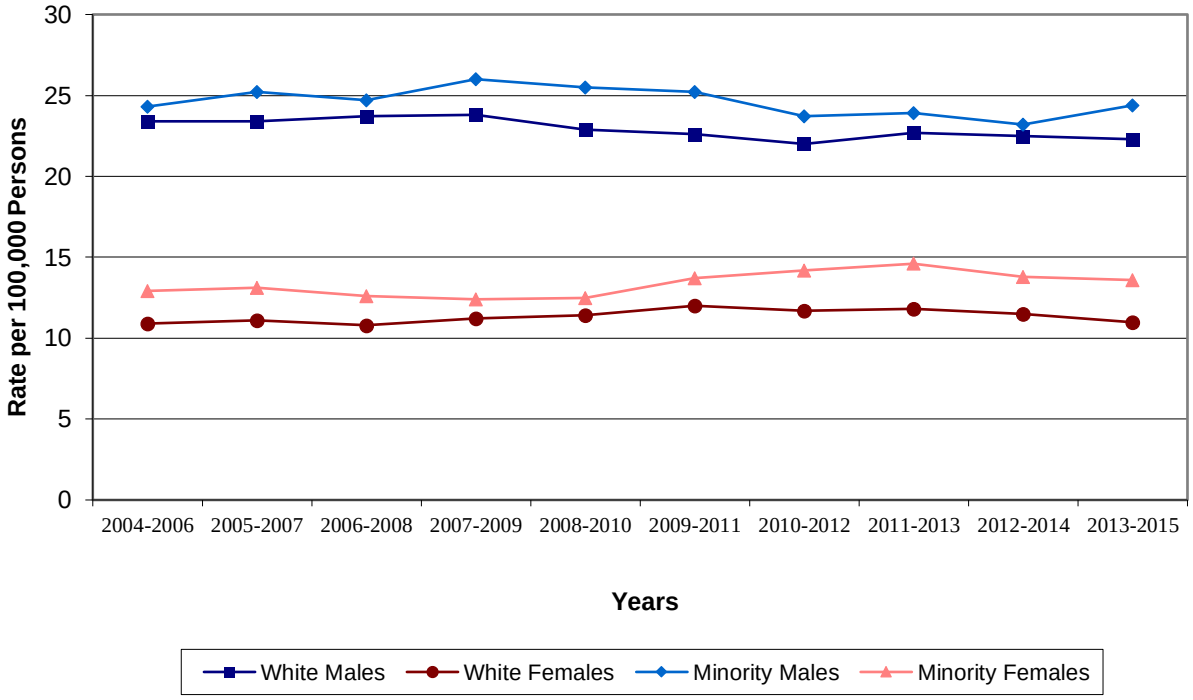


Figure 10: 2004 – 2015 Endocrine Cancer Incidence Trends by Gender and Race

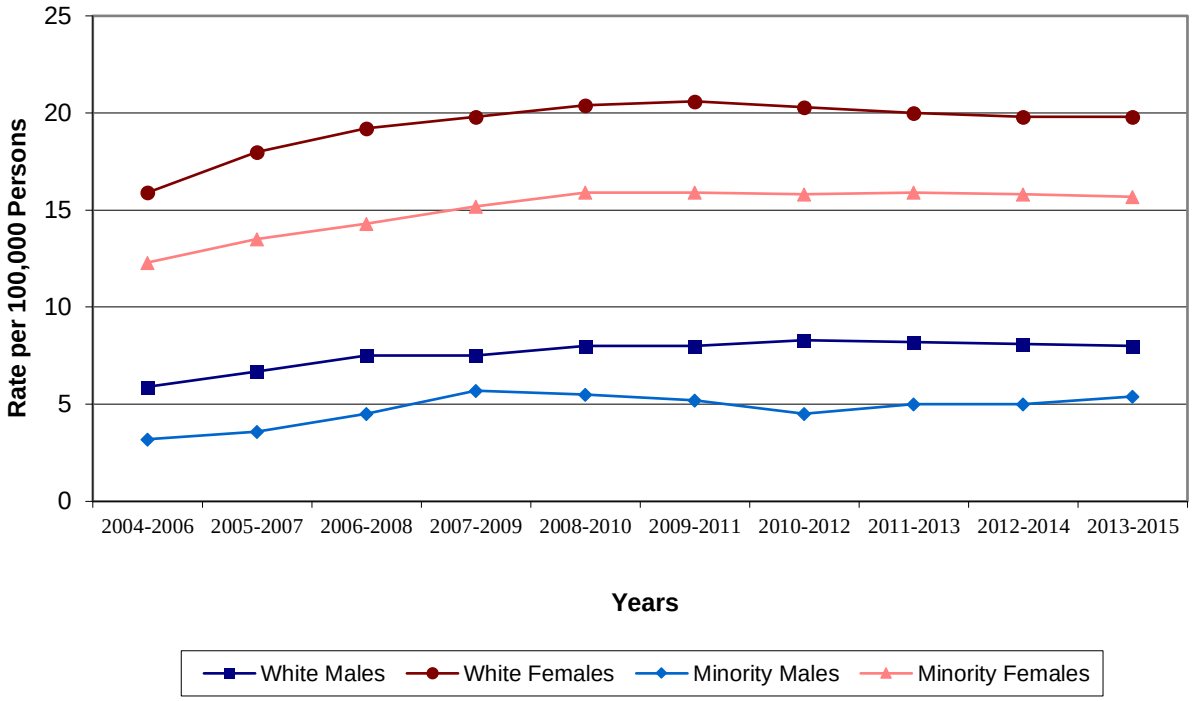


Figure 11: 2004 – 2015 Stomach Cancer Mortality Trends by Gender and Race

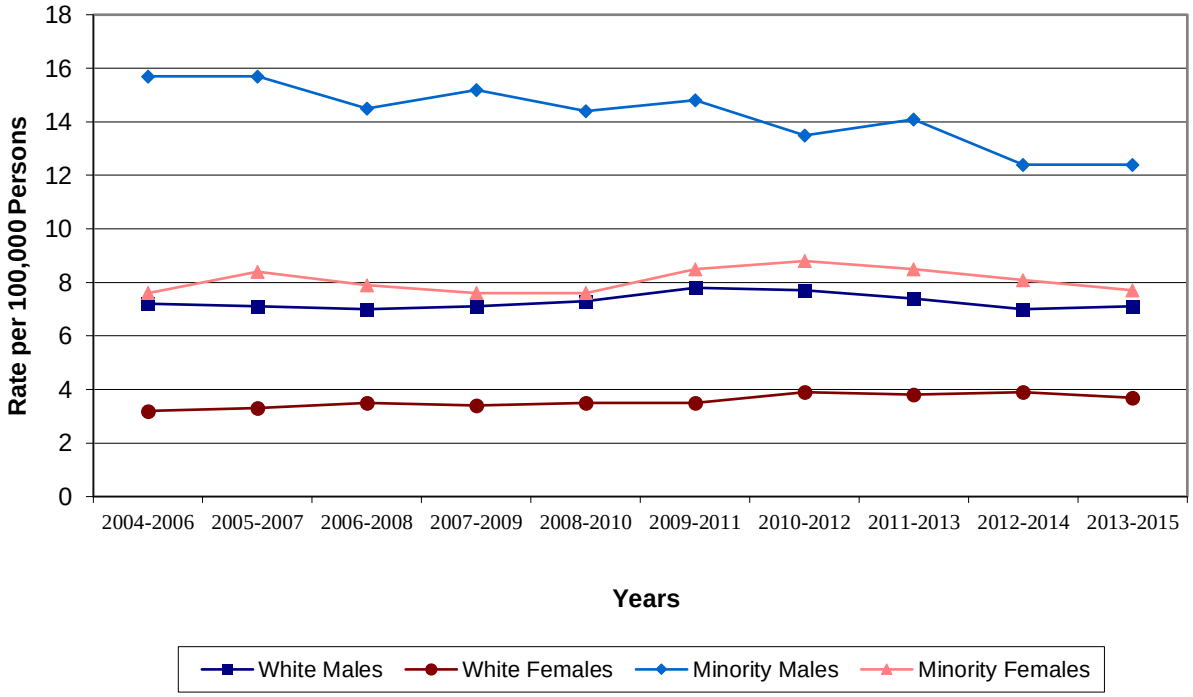


Figure 12: 2004 – 2015 Liver Cancer Mortality Trends by Gender and Race

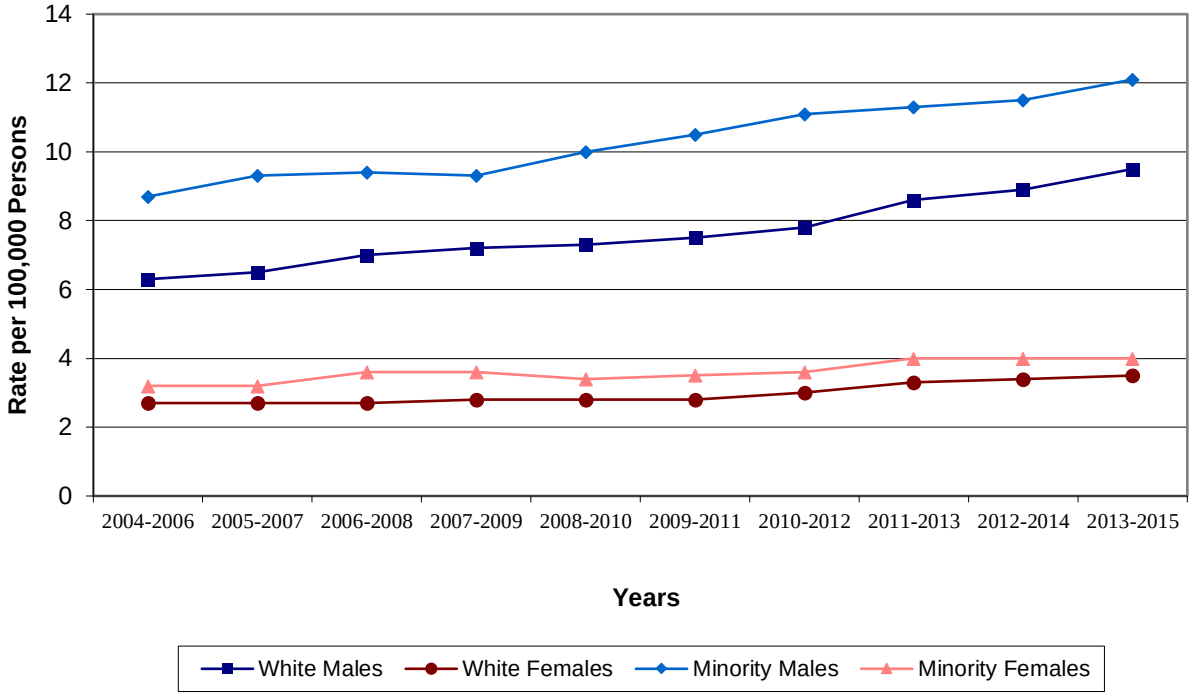


Figure 13: 2004 – 2015 Pancreatic Cancer Mortality Trends by Gender and Race

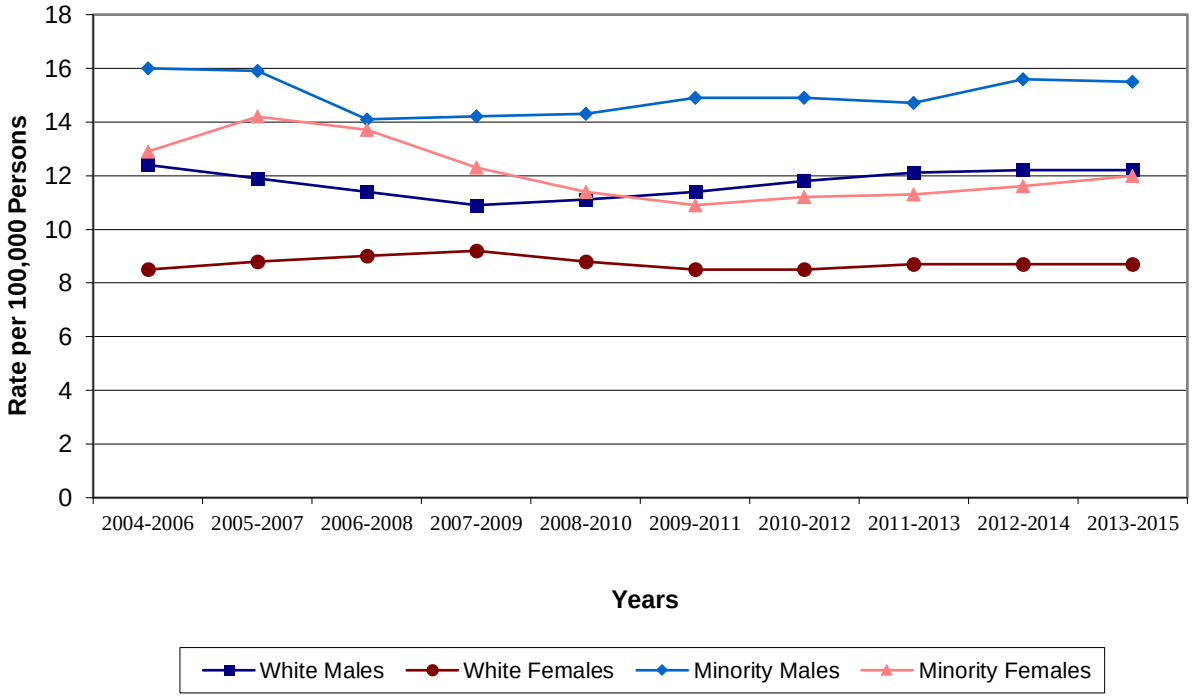
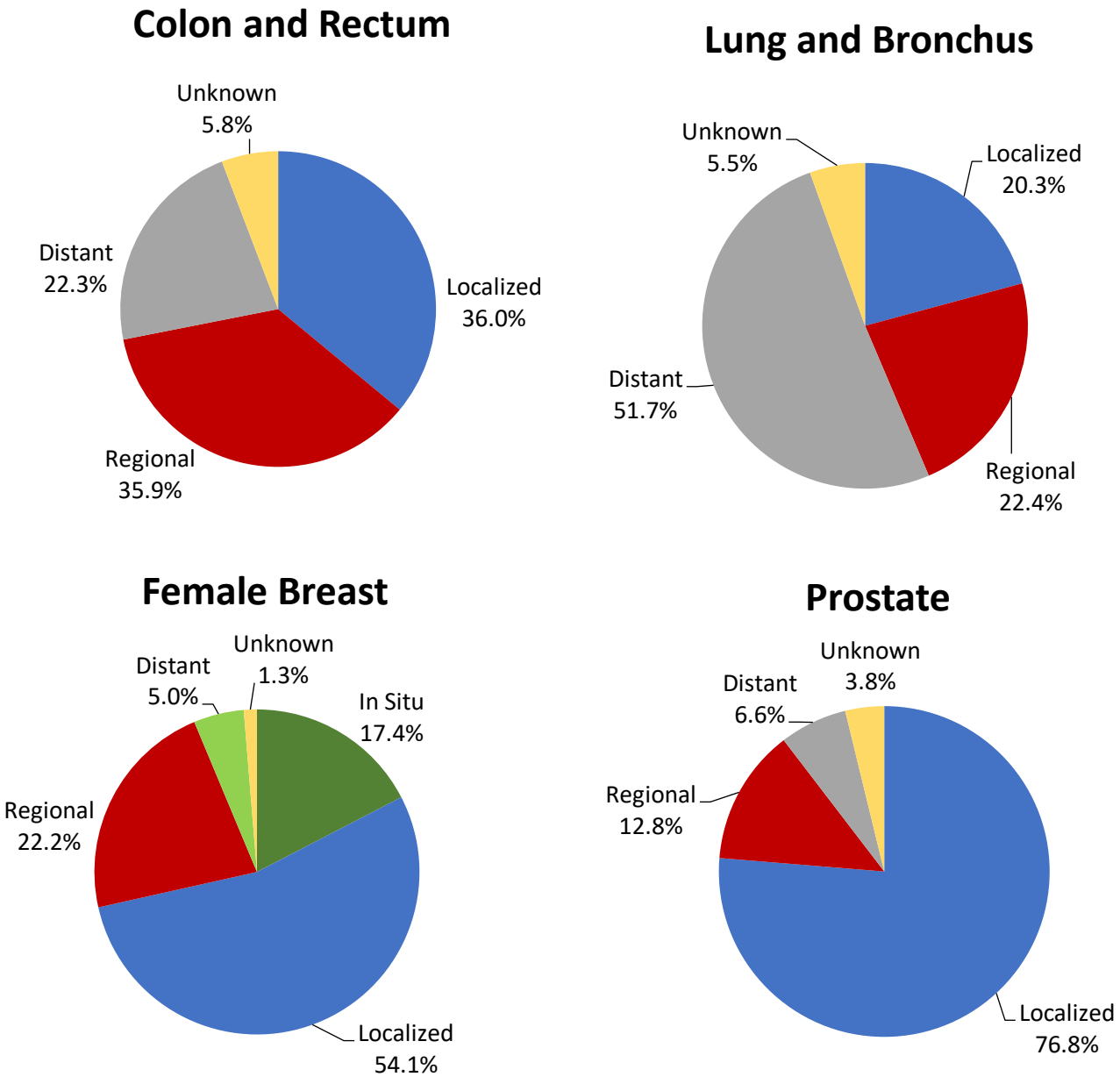


Figure 14: 2015 Percent of Top Four Cancer Cases by Stage



Appendix A: 2015 Population Estimates by Race and County

	Whites	Blacks	American Indian	Asian/ Pacific Islander	Total
North Carolina	7,250,083	2,304,896	167,513	312,694	10,035,186
Alamance	120,246	32,536	2,306	2,769	157,857
Alexander	34,340	2,349	187	428	37,304
Alleghany	10,413	246	57	96	10,812
Anson	12,345	12,769	224	294	25,632
Ashe	26,324	329	87	160	26,900
Avery	16,602	789	92	109	17,592
Beaufort	34,357	12,394	479	313	47,543
Bertie	7,354	12,654	135	147	20,290
Bladen	20,969	12,099	1,061	137	34,266
Brunswick	106,336	14,039	1,112	1,135	122,622
Buncombe	229,448	17,801	1,463	4,096	252,808
Burke	77,891	6,002	791	4,020	88,704
Cabarrus	152,792	35,548	1,473	6,695	196,508
Caldwell	75,831	4,353	459	639	81,282
Camden	8,607	1,367	52	253	10,279
Carteret	62,840	4,472	482	1,069	68,863
Caswell	14,929	7,797	149	137	23,012
Catawba	133,224	14,692	900	6,777	155,593
Chatham	58,863	9,511	897	1,499	70,770
Cherokee	25,919	521	497	200	27,137
Chowan	9,107	4,966	72	227	14,372
Clay	10,505	167	46	37	10,755
Cleveland	74,565	20,877	359	1,123	96,924
Columbus	36,471	17,911	2,162	383	56,927
Craven	75,714	23,657	797	3,259	103,427
Cumberland	175,645	131,810	6,652	11,474	325,581
Currituck	23,209	1,589	166	267	25,231
Dare	33,919	1,166	200	301	35,586
Davidson	144,134	16,054	1,334	2,674	164,196
Davie	38,168	2,859	266	403	41,696
Duplin	41,493	15,651	860	666	58,670
Durham	161,699	119,555	3,095	16,224	300,573
Edgecombe	21,562	31,600	386	283	53,831
Forsyth	251,054	103,883	3,264	9,818	368,019

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Appendix A (continued): 2015 Population Estimates by Race and County

	Whites	Blacks	American Indian	Asian/ Pacific Islander	Total
Franklin	45,158	17,393	614	509	63,674
Gaston	172,591	35,816	1,327	3,632	213,366
Gates	7,465	3,848	83	52	11,448
Graham	7,809	72	676	53	8,610
Granville	38,188	19,323	531	507	58,549
Greene	12,506	8,018	496	170	21,190
Guilford	303,760	183,290	4,278	26,220	517,548
Halifax	21,318	28,346	2,171	488	52,323
Harnett	94,154	29,393	2,486	2,091	128,124
Haywood	58,281	861	423	334	59,899
Henderson	105,646	4,203	832	1,646	112,327
Hertford	8,811	14,735	329	233	24,108
Hoke	27,380	18,976	5,374	1,111	52,841
Hyde	3,776	1,635	44	48	5,503
Iredell	142,577	21,751	1,050	4,614	169,992
Jackson	35,561	1,115	4,180	471	41,327
Johnston	150,973	30,998	1,801	1,961	185,733
Jones	6,706	3,167	81	46	10,000
Lee	45,210	12,491	859	878	59,438
Lenoir	32,801	24,220	406	614	58,041
Lincoln	74,661	4,897	350	666	80,574
McDowell	42,111	1,975	368	509	44,963
Macon	32,895	664	272	319	34,150
Madison	20,507	395	101	101	21,104
Martin	12,889	10,179	100	166	23,334
Mecklenburg	616,347	345,036	8,960	63,123	1,033,466
Mitchell	14,779	149	141	114	15,183
Montgomery	21,340	5,418	288	462	27,508
Moore	79,231	12,619	1,014	1,572	94,436
Nash	53,425	38,449	908	1,137	93,919
New Hanover	181,457	32,974	1,360	4,077	219,868
Northampton	8,157	12,066	143	67	20,433
Onslow	146,801	32,685	2,008	5,539	187,033
Orange	109,992	18,032	995	11,677	140,696
Pamlico	9,982	2,604	99	99	12,784

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Appendix A (continued): 2015 Population Estimates by Race and County

	Whites	Blacks	American Indian	Asian/ Pacific Islander	Total
Pasquotank	23,640	15,123	232	678	39,673
Pender	46,858	9,774	586	462	57,680
Perquimans	10,048	3,214	66	82	13,410
Person	27,788	10,852	351	207	39,198
Pitt	107,399	63,604	987	4,192	176,182
Polk	19,057	1,037	122	128	20,344
Randolph	129,217	9,644	1,592	2,100	142,553
Richmond	28,648	14,768	1,465	555	45,436
Robeson	43,491	33,504	56,082	1,215	134,292
Rockingham	72,338	18,091	584	662	91,675
Rowan	112,721	23,607	875	1,818	139,021
Rutherford	58,643	7,023	304	492	66,462
Sampson	42,997	17,785	2,184	602	63,568
Scotland	16,579	14,147	4,353	339	35,418
Stanly	51,688	7,210	258	1,430	60,586
Stokes	43,883	2,079	231	179	46,372
Surry	68,316	3,219	428	585	72,548
Swain	9,627	264	4,433	104	14,428
Transylvania	31,322	1,483	144	253	33,202
Tyrrell	2,436	1,569	36	99	4,140
Union	186,655	28,069	1,550	6,110	222,384
Vance	20,635	23,074	361	281	44,351
Wake	715,273	225,846	8,839	72,016	1,021,974
Warren	8,341	10,605	1,181	86	20,213
Washington	5,975	6,171	150	51	12,347
Watauga	51,016	1,153	192	663	53,024
Wayne	79,670	41,567	1,026	2,056	124,319
Wilkes	64,420	3,386	274	439	68,519
Wilson	46,481	33,588	532	1,085	81,686
Yadkin	35,739	1,380	244	200	37,563
Yancey	17,062	254	141	107	17,564

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Appendix B: 2015 Population Estimates by Age Group and County

	0-19	20-44	45-64	65+	Total
North Carolina	2,558,659	3,308,702	2,651,133	1,516,692	10,035,186
Alamance	41,111	48,395	42,391	25,960	157,857
Alexander	8,428	10,925	10,688	7,263	37,304
Alleghany	2,148	2,675	3,259	2,730	10,812
Anson	5,549	8,699	7,069	4,315	25,632
Ashe	5,431	7,053	7,985	6,431	26,900
Avery	3,255	5,742	4,905	3,690	17,592
Beaufort	10,882	12,593	13,513	10,555	47,543
Bertie	4,072	6,204	5,958	4,056	20,290
Bladen	8,128	9,663	9,823	6,652	34,266
Brunswick	22,470	29,481	36,374	34,297	122,622
Buncombe	53,972	82,486	69,163	47,187	252,808
Burke	19,721	25,764	26,420	16,799	88,704
Cabarrus	55,839	63,927	51,684	25,058	196,508
Caldwell	18,591	23,548	24,344	14,799	81,282
Camden	2,625	3,007	3,105	1,542	10,279
Carteret	13,792	18,512	21,018	15,541	68,863
Caswell	4,816	6,453	7,084	4,659	23,012
Catawba	39,131	46,568	44,115	25,779	155,593
Chatham	15,329	17,587	20,127	17,727	70,770
Cherokee	5,296	6,410	7,974	7,457	27,137
Chowan	3,288	3,748	4,039	3,297	14,372
Clay	2,089	2,441	3,083	3,142	10,755
Cleveland	24,102	28,480	27,365	16,977	96,924
Columbus	13,688	17,410	15,477	10,352	56,927
Craven	25,454	35,463	24,126	18,384	103,427
Cumberland	92,082	124,783	72,064	36,652	325,581
Currituck	6,128	7,246	8,000	3,857	25,231
Dare	7,547	9,794	11,358	6,887	35,586
Davidson	40,505	47,604	47,717	28,370	164,196
Davie	9,937	11,049	12,549	8,161	41,696
Duplin	15,784	17,381	15,741	9,764	58,670
Durham	75,004	119,011	72,097	34,461	300,573
Edgecombe	13,683	15,537	15,118	9,493	53,831
Forsyth	98,132	117,633	97,884	54,370	368,019

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Appendix B (continued): 2014 Population Estimates by Age Group and County

	0-19	20-44	45-64	65+	Total
Franklin	16,162	19,045	18,515	9,952	63,674
Gaston	53,807	67,401	59,310	32,848	213,366
Gates	2,642	3,054	3,700	2,052	11,448
Graham	2,003	2,279	2,365	1,963	8,610
Granville	13,750	17,817	17,647	9,335	58,549
Greene	4,907	7,152	5,944	3,187	21,190
Guilford	134,809	174,926	134,801	73,012	517,548
Halifax	12,411	14,860	15,096	9,956	52,323
Harnett	38,082	45,756	29,644	14,642	128,124
Haywood	12,052	16,029	17,422	14,396	59,899
Henderson	23,988	29,298	31,173	27,868	112,327
Hertford	5,732	7,185	6,837	4,354	24,108
Hoke	16,225	20,485	11,598	4,533	52,841
Hyde	1,042	1,796	1,647	1,018	5,503
Iredell	44,155	52,093	48,430	25,314	169,992
Jackson	9,681	14,057	10,109	7,480	41,327
Johnston	52,901	59,266	50,041	23,525	185,733
Jones	2,083	2,657	3,055	2,205	10,000
Lee	16,215	18,401	15,614	9,208	59,438
Lenoir	14,455	16,504	16,432	10,650	58,041
Lincoln	19,359	23,721	24,350	13,144	80,574
McDowell	10,193	13,176	13,114	8,480	44,963
Macon	7,167	8,294	9,527	9,162	34,150
Madison	4,735	6,049	6,019	4,301	21,104
Martin	5,219	6,085	7,021	5,009	23,334
Mecklenburg	277,761	396,814	252,079	106,812	1,033,466
Mitchell	3,050	3,940	4,551	3,642	15,183
Montgomery	6,946	7,790	7,540	5,232	27,508
Moore	21,766	25,666	24,366	22,638	94,436
Nash	23,443	27,791	26,709	15,976	93,919
New Hanover	49,031	78,927	56,224	35,686	219,868
Northampton	4,236	5,193	6,252	4,752	20,433
Onslow	53,934	86,422	30,139	16,538	187,033
Orange	36,693	51,644	36,029	16,330	140,696
Pamlico	2,269	3,164	3,867	3,484	12,784

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Appendix B (continued): 2014 Population Estimates by Age Group and County

	0-19	20-44	45-64	65+	Total
Pasquotank	9,948	13,062	10,310	6,353	39,673
Pender	14,012	16,926	16,692	10,050	57,680
Perquimans	2,869	3,264	3,892	3,385	13,410
Person	9,301	11,189	11,661	7,047	39,198
Pitt	47,185	68,640	39,747	20,610	176,182
Polk	3,876	4,495	6,189	5,784	20,344
Randolph	36,381	42,116	40,586	23,470	142,553
Richmond	11,617	14,057	12,200	7,562	45,436
Robeson	39,001	43,284	33,847	18,160	134,292
Rockingham	20,994	25,756	27,752	17,173	91,675
Rowan	34,753	42,491	38,450	23,327	139,021
Rutherford	15,399	18,339	19,439	13,285	66,462
Sampson	17,255	18,985	16,901	10,427	63,568
Scotland	9,172	10,939	9,438	5,869	35,418
Stanly	14,616	18,089	17,044	10,837	60,586
Stokes	10,125	12,714	14,387	9,146	46,372
Surry	17,348	20,266	20,590	14,344	72,548
Swain	3,561	4,355	3,781	2,731	14,428
Transylvania	6,231	8,157	9,203	9,611	33,202
Tyrrell	817	1,397	1,127	799	4,140
Union	68,790	66,597	61,028	25,969	222,384
Vance	11,665	12,914	12,164	7,608	44,351
Wake	281,567	373,540	261,489	105,378	1,021,974
Warren	4,185	5,446	6,039	4,543	20,213
Washington	2,851	3,102	3,661	2,733	12,347
Watauga	11,662	21,716	11,916	7,730	53,024
Wayne	32,913	40,604	32,243	18,559	124,319
Wilkes	15,793	18,888	19,962	13,876	68,519
Wilson	21,253	24,356	22,380	13,697	81,686
Yadkin	8,951	10,411	11,125	7,076	37,563
Yancey	3,655	4,598	5,106	4,205	17,564

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Appendix C: 2015 Population Estimates by Race, Sex and County

	White Males	White Females	Minority Males	Minority Females	Total
North Carolina	3,564,320	3,685,763	1,314,893	1,470,210	10,035,186
Alamance	57,659	62,587	17,305	20,306	157,857
Alexander	17,204	17,136	1,770	1,194	37,304
Alleghany	5,137	5,276	215	184	10,812
Anson	6,462	5,883	6,990	6,297	25,632
Ashe	12,985	13,339	319	257	26,900
Avery	8,790	7,812	781	209	17,592
Beaufort	16,743	17,614	6,032	7,154	47,543
Bertie	3,741	3,613	6,651	6,285	20,290
Bladen	10,302	10,667	6,075	7,222	34,266
Brunswick	51,521	54,815	7,877	8,409	122,622
Buncombe	109,770	119,678	11,348	12,012	252,808
Burke	38,237	39,654	5,738	5,075	88,704
Cabarrus	75,067	77,725	20,537	23,179	196,508
Caldwell	37,460	38,371	2,758	2,693	81,282
Camden	4,266	4,341	826	846	10,279
Carteret	30,798	32,042	3,051	2,972	68,863
Caswell	7,549	7,380	4,112	3,971	23,012
Catawba	65,207	68,017	11,004	11,365	155,593
Chatham	28,298	30,565	5,559	6,348	70,770
Cherokee	12,555	13,364	596	622	27,137
Chowan	4,399	4,708	2,412	2,853	14,372
Clay	5,123	5,382	131	119	10,755
Cleveland	36,203	38,362	10,330	12,029	96,924
Columbus	17,861	18,610	10,312	10,144	56,927
Craven	38,868	36,846	13,513	14,200	103,427
Cumberland	89,283	86,362	70,300	79,636	325,581
Currituck	11,542	11,667	990	1,032	25,231
Dare	16,779	17,140	821	846	35,586
Davidson	70,660	73,474	9,507	10,555	164,196
Davie	18,649	19,519	1,653	1,875	41,696
Duplin	20,721	20,772	7,973	9,204	58,670
Durham	79,267	82,432	64,282	74,592	300,573
Edgecombe	10,374	11,188	14,551	17,718	53,831
Forsyth	121,013	130,041	53,685	63,280	368,019

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Appendix C (continued): 2015 Population Estimates by Race, Sex and County

	White Males	White Females	Minority Males	Minority Females	Total
Franklin	22,685	22,473	8,921	9,595	63,674
Gaston	83,954	88,637	19,024	21,751	213,366
Gates	3,707	3,758	1,891	2,092	11,448
Graham	3,867	3,942	383	418	8,610
Granville	19,417	18,771	10,403	9,958	58,549
Greene	6,756	5,750	4,829	3,855	21,190
Guilford	146,615	157,145	98,725	115,063	517,548
Halifax	10,353	10,965	14,652	16,353	52,323
Harnett	46,813	47,341	16,589	17,381	128,124
Haywood	27,998	30,283	828	790	59,899
Henderson	50,791	54,855	3,243	3,438	112,327
Hertford	4,573	4,238	7,343	7,954	24,108
Hoke	13,874	13,506	12,282	13,179	52,841
Hyde	2,009	1,767	1,059	668	5,503
Iredell	70,572	72,005	13,070	14,345	169,992
Jackson	17,398	18,163	2,910	2,856	41,327
Johnston	74,315	76,658	16,792	17,968	185,733
Jones	3,326	3,380	1,511	1,783	10,000
Lee	22,267	22,943	6,770	7,458	59,438
Lenoir	16,155	16,646	11,580	13,660	58,041
Lincoln	37,108	37,553	2,953	2,960	80,574
McDowell	20,891	21,220	1,601	1,251	44,963
Macon	15,851	17,044	715	540	34,150
Madison	10,087	10,420	338	259	21,104
Martin	6,208	6,681	4,708	5,737	23,334
Mecklenburg	302,851	313,496	193,166	223,953	1,033,466
Mitchell	7,264	7,515	201	203	15,183
Montgomery	10,528	10,812	2,841	3,327	27,508
Moore	38,292	40,939	6,950	8,255	94,436
Nash	26,198	27,227	18,869	21,625	93,919
New Hanover	87,642	93,815	17,801	20,610	219,868
Northampton	4,050	4,107	5,846	6,430	20,433
Onslow	80,809	65,992	20,899	19,333	187,033
Orange	52,876	57,116	14,400	16,304	140,696
Pamlico	5,024	4,958	1,523	1,279	12,784

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

Appendix C (continued): 2014 Population Estimates by Race, Sex and County

	White Males	White Females	Minority Males	Minority Females	Total
Pasquotank	11,719	11,921	7,717	8,316	39,673
Pender	23,515	23,343	5,293	5,529	57,680
Perquimans	4,889	5,159	1,541	1,821	13,410
Person	13,598	14,190	5,437	5,973	39,198
Pitt	51,768	55,631	31,133	37,650	176,182
Polk	9,099	9,958	624	663	20,344
Randolph	63,653	65,564	6,632	6,704	142,553
Richmond	14,103	14,545	8,133	8,655	45,436
Robeson	21,210	22,281	43,365	47,436	134,292
Rockingham	35,091	37,247	9,089	10,248	91,675
Rowan	55,752	56,969	12,821	13,479	139,021
Rutherford	28,354	30,289	3,780	4,039	66,462
Sampson	21,332	21,665	9,812	10,759	63,568
Scotland	8,187	8,392	9,382	9,457	35,418
Stanly	25,571	26,117	4,517	4,381	60,586
Stokes	21,479	22,404	1,312	1,177	46,372
Surry	33,227	35,089	2,089	2,143	72,548
Swain	4,667	4,960	2,335	2,466	14,428
Transylvania	15,018	16,304	1,014	866	33,202
Tyrrell	1,221	1,215	1,041	663	4,140
Union	92,324	94,331	17,134	18,595	222,384
Vance	9,942	10,693	10,782	12,934	44,351
Wake	352,136	363,137	144,148	162,553	1,021,974
Warren	4,245	4,096	5,825	6,047	20,213
Washington	2,869	3,106	2,882	3,490	12,347
Watauga	25,430	25,586	1,046	962	53,024
Wayne	40,115	39,555	20,889	23,760	124,319
Wilkes	31,668	32,752	2,136	1,963	68,519
Wilson	22,471	24,010	16,168	19,037	81,686
Yadkin	17,667	18,072	923	901	37,563
Yancey	8,383	8,679	273	229	17,564

Population estimates are from the bridged-race population estimates obtained from the National Center for Health Statistics available online at www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2016.

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